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## THE NAVY STOCK FUND

ROBERT D. FISHER

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#### THE NAVY STOCK FUND

by

Lieutenant Commander Robert D. Fisher SC USN

Bachelor of Science

1946

Northwestern University

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Thesis directed by Arlin Rex Johnson, Ph.D. Professor of Business Administration

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THE NAVY STOCK FUND, 1962

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#### CHAFTER I

#### INTRODUCTION

The Navy Stock Fund is a revolving fund used to finance the purchase of material which is held in inventory as an asset of the stock fund until issued for use. When material is issued from the stock fund inventory the customer appropriation is charged for the material issued and the stock fund is reimbursed. The reimbursement from these issues is reinvested in the inventories for future use, thus perpetuating the revolving nature of the Navy Stock Fund.<sup>1</sup>

The above description is just one of many that may be found describing the nature and purpose of the Navy Stock Fund. Some authorities and sources go into great detail relating the fund to industrial-type working capital funds or distinguishing between revolving stock funds and revolving management funds. Many writers are careful to distinguish between the Navy Stock Fund and its subsidiary inventory account, the Navy Stock Account. The above statement is considered sufficiently comprehensive for the reader of this paper at this introductory stage.

The history of the Navy Stock Fund closely parallels the history of the Navy Supply System itself and the history of financial and inventory management in the Navy. There have been several historical reviews undertaken which treat primarily of its legislative and operational background.<sup>2</sup> It is not the intent of this paper to dwell on the historical development of the Navy Stock Fund. The historical data that have been included are considered necessary for continuity

<sup>1</sup>Statement of RADM M. A. Hirsch, USN, Assistant Comptroller of the Navy Director of Budget and Reports, before the Defense Subcommittee of the House Appropriations Committee, February, 1962. (Unpublished at time of this writing)

<sup>2</sup>See (1) <u>History of Navy Stock Fund and Naval Supply Account, 1945</u>, Bureau of Supplies and Accounts, Navy Department, Washington, D.C. (mimeographed) and (2) Hempstead, John W., <u>A Study of the Navy Stock Fund 1893-1952</u>, (Unpublished master's thesis, The American University, Washington, D.C., 1953.

and for emphasizing the importance and scope of its influence on the Navy Supply System.

It is the objective of this study to: (1) Set forth the regulations and policies under which the Navy Stock Fund is currently managed; (2) identify several of the more pressing problems facing the managers of the fund; and (3) analyse these policies and problems. It is the sincere desire of the writer to: (1) Increase his knowledge and understanding of the Navy Stock Fund, its management, and its contribution to material readiness, financial management and control in the Navy Department; (2) transmit this information to those who, by vocation or avocation, share this same interest; and (3) from an analysis of these data, present recommendations for their consideration.

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#### CHAFTER II

#### PURPOSE AND NATURE

The Need and the Establishment

A source of embarrassment is found in the delay necessarily incident to filling emergency requisitions for articles not in store of which purchase must be made. The laws of 1890 and 1891 provide that all supplies purchased from appropriations for the naval service shall be considered as belonging to the Navy and not to any particular bureau. These laws have an admirable tendency to limit purchases to absolute foreseen necessities, as chiefs of bureaus naturally object to approving requisitions for the purchase of supplies out of appropriations under their control, which may in possible contingencies be diverted to the uses of other departments. There should, however, be always on hand sufficient supplies to meet constant demands. Delays would be obviated if there could be kept always in store a stock of ordinary commercial articles to be replenished from time to time by requisitions emanating from the general storekeeper. In order to secure this end by a method that could in no way be objectionable to the several bureaus, I would respectfully recommend that Congress be asked to create a fund amounting to \$200,000, to be known as the supply fund, out of which ordinary commercial articles may be purchased on requisitions originated by general storekeepers and approved by the Paymaster-General; such supplies when issued to the different departments to be charged against the proper appropriation, and the fund reimbursed and in this way kept intact. This would not entail any expenditure in excess of the regular annual appropriation; it would prevent detention of ships needed for sudden and immediate service and would enable the purchase by contract, after poulic advertisement, of a large quantity of supplies which now must of necessity be procured in the open market under emergency requisitions.<sup>3</sup>

Paymaster-General of the Navy Stewart's request, quoted in part above, was one of a series of actions taken by top Navy management during the 1880's to improve the efficiency and effectiveness of the Navy's supply functions. The term "supply system" is not used because no one supply system existed at the time. Secretary of the Navy Hilary A. Herbert testified to the situation that had existed prior to 1886 as follows:

The general-storekeeper system was established in the Navy ten years ago. Prior to that time the eight bureaus (of the Navy Department) acted

<sup>&</sup>lt;sup>3</sup>U.S. Department of the Navy, Bureau of Supplies and Accounts, <u>Report of</u> the Paymaster-General of the Navy, 1892, (Washington: Government Printing Office, 1892), p. 5.



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independently of each other in the matter of purchasing, keeping accounts, caring for and issuing articles under their cognizance. This resulted in many differing systems of accounts, and also, as each bureau necessarily kept articles in stock, in large and unnecessary accumulations of stores, bureaus often purchasing for their own use articles, large stocks of which were at the time lying idle in the storehouses of other bureaus. Secretary Whitney concentrated the entire system of purchasing for the Navy under the Paymaster-General, and established the general-storekeeper system, whereby all articles on hand, no matter under what bureaus, were consolidated for general use and placed under the control of the Bureau of Supplies and Accounts, which was held responsible for their purchase, care and issuance.

It can be readily seen that the paymaster-general had been given the responsibility but not the purse. His reference to the laws of 1890 and 1891 indicates that his problem was not of recent vintage. One of these laws also gives evidence of the birth of the <u>Navy's</u> centralized inventory management\_system which is, to a great extent, the prime reason for the existence of the Navy Stock Fund.

...all supplies purchased with moneys appropriated by this Act shall be deemed to be purchased for the Navy and not for any Bureau thereof, and these supplies together with all supplies on hand, shall be arranged, classified consolidated, and catalogued, and issued for consumption or use, under such regulations as the Secretary of the Navy may prescribe, without regard to the bureau for which they are purchased.<sup>5</sup>

If this Act has not been passed, Paymaster-General Stewart would probably have not found himself in a position that was "a source of embarrassment"<sup>6</sup> and the Navy Stock Fund, as it is now known, may not have been established for it was not until the passage of Public Law 81-216<sup>7</sup> in 1949, that the other departments of the Department of Defense were authorized to establish revolving stock funds.

<sup>4</sup>U.S. Department of the Navy, <u>Annual Report of the Secretary of the Navy</u> for the Year 1896, (Washington: Government Printing Office, 1896), pp. 30-31.

<sup>5</sup>U.S. 26 Stat 205, Act of June 30, 1890.

<sup>6</sup>Supra, p. 3.

<sup>7</sup>Title IV of the National Security Act Amendments of 1949.

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The supply fund requested by Paymaster General Stewart was established by the Act of March 3, 1893.<sup>8</sup> Its use was limited to the purchase of "ordinary commercial supplies for the Naval service." If the goal of these early officials was to establish a single supply system and a single stock fund, it was not realized, and it has not been realized today. Six of the eight "technical bureaus" which existed at the time were also known as "material bureaus." They were not only responsible for the design of specific equipment but also for the determination of the material requirements for the support of these equipments. The laws enacted in 1890 and 1891 transferred only the responsibility for "purchase, care and issuance" to the Bureau of Supplies and Accounts. The Act of March 3, 1893, provided the wherewithal to fulfill this responsibility.

Although a pressing need for funds with which to finance a new function was the immediate purpose for the establishment of the Navy Stock Fund, there was another more fundamental and controversial purpose. Legislative action to centralize control over inventories was "inevitable, not only from the standpoint of good business practice but also from the obvious defects in the whole system of purchasing, storage and control over supplies."<sup>9</sup> The Secretary of the Navy, in one of his annual reports during this period, made the succinct comment, "It is idle to suppose that abuses of the character I have glanced at can be prevented merely by a change in the personnel of the Department. It is the system that is vicious."<sup>10</sup> The Secretary's dilemma was not unique to either the time or the organization.

The information that management needs to control the day-to-day business is organized along lines of responsibilities within the company. This may

<sup>8</sup>U.S., 27 Stat 723

<sup>9</sup>U.S. Navy Department Bureau of Supplies and Accounts, <u>History of the Navy</u> Stock Fund and Naval Supply Account, 1945, (Mimeographed), p. 5.

<sup>10</sup>Ibid., p. 6

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sound easy, but it doesn't always work out that way. The trouble is that many companies don't have clearly defined lines of responsibility among their executives. The result, more than once, has been that a company which innocently went to its accountants for "a little help with our reports" has found instead it had to make a complete overhaul of the organization.<sup>11</sup>

The bureau organization, unique to the Navy, has not changed substantially since its inception in the mid-eighteenth century. This organization structure has had a profound influence on the development of the Navy's logistic support system and the Navy Stock Fund. It has made much more difficult the making of changes in policy because of the necessity for any such change to comply with the systems in effect in each of the different bureaus.

Since its establishment in 1393, the purpose of the Navy Stock Fund has not changed materially. The present charter, issued in 1955, states:

The Navy Stock Fund is hereby reestablished to provide a simplified and effective means of managing, controlling, financing, and accounting for..., such materials, supplies and equipment as are identified under Section IV hereafter.<sup>12</sup>

This is not surprising. The need still exists for a suspense account in which to carry inventories until finally expended. Inventory management is simplified on a Navy-wide basis as the number of accounts is reduced. Control is centralized. Although the statement of the Paymaster General, in his annual report for fiscal year 1918, "The Specific advantage of the Naval Supply Account---and there are no disadvantages" may have been biased, it is generally recognized that this type of fund has considerable merit.

The theory of procurement, distribution, and control of inventories through the operation of stock funds has been advanced as being one of the soundest methods for improving supply management. It is true that accounting for the dollar value of supplies purchased, on hand, and consumed can be accomplished without the use of stock funds, and for technical items with

11. Keeping Closer Tabs on Cost", Business Week, December 9, 1961.

<sup>12</sup>U.S., Department of Defense, Department of the Navy, <u>Charter for the</u> Navy Stock Fund, BUSANDA INSTRUCTION 7610.1 of 26 September 1955.

low turnover such funds are not feasible. Furthermore, it is recognized that stock funds cannot cure all the faults of poor supply management. The use of stock funds simplifies accounting and budgeting. Stock funds can improve the ability of a good manager to do an effective job in purchasing and in inventory control. It is generally acknowledged that the use of stock funds will simplify Congressional control of operations by clearly distinguishing consumption from supply and by allowing Congress to maintain control over consumption by the appropriation process with better knowledge of previous consumption and of quantities of repetitiveuse material on hand.<sup>13</sup>

#### The Revolving Fund Concept

And the Secretary of the Treasury is hereby authorized and directed to cause general account of advances to be charged with the sum of two hundred thousand dollars, which amount shall be carried to the credit of a permanent naval supply fund to be used under the direction of the Secretary of the Navy in the purchase of ordinary commercial supplies for the naval service, and to be reimbursed from the proper naval appropriations whenever the supplies purchased under said fund are issued for use.<sup>14</sup>

The Navy Stock Fund began as a revolving fund which was to consist of a total of "cash" and material not to exceed \$200,000 in value. As material was "sold" to appropriations for use the fund was reimbrused. This revolving fund concept has exerted an influence on the management of the fund throughout its existence. By the simple expedient of limiting the total amount of the fund, Congress has been able to control the numbers and quantities of items carried in naval inventories. The limitation established in 1893 soon proved insufficient. Additional amounts were authorized in each of the years 1897, 1898, 1899 and 1892. The demands on the fund continued to increase and when Congressional approval of increases in the total could not be obtained, drastic action was taken.

In the face of constant refusals by Congress to increase the fund, Paymaster General Rogers drafted the following letter which was signed by the Acting Secretary of the Navy in the absence of Secretary Meyer: "Upon the recommendation of this bureau, and after the unanimous approval of the bureaus of the Navy Department, the department has directed that on

<sup>13</sup>U.S., Congress, House, Committee on Government Operations, <u>Military</u> <u>Supply Management</u>, Third Intermediate Report, July 16, 1953, (Washington: Government Printing Office, 1953), p. 15.

14U.S., 27 Stat 723, Act of March 3, 1893.

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July 1, 1907, all material which has been purchased from annual appropriations (except that on attached list) be transferred to and incorporated into the Naval Supply Fund. Thereafter all such material will have its value debited to the appropriation under which it is drawn and credited to the Navy Supply Fund."

Secretary Meyer, upon learning that the "Common general stock" had been transferred to the permanent supply fund, immediately took steps to have the stock segregated. A letter was prepared in the Secretary's office directing that this be done... Paymaster General Rogers vigorously opposed the Secretary's letter and presented the argument that this transfer of stores was not an increase in the money value of the fund and that a distinction should be made between the stores or stock placed in the fund and the Naval Supply Fund and that the fund itself was not distrubed.<sup>15</sup>

The Attorney General recommended that such action not be taken without legisla-

tion and Congress authorized the transfer but made certain that the "fund itself

was not disturbed."

All stores on hand July first, nineteen hundred and ten, shall be charged to a naval supply account on the records of the Bureau of Supplies and Accounts, and all purchases of stock or expenditures for manufactured or repaired articles for stock at navy yards or station, shall be charged to this account and be paid for from "General Account of Advances."

The amount so advanced during the fiscal years nineteen hundred and eleven and nineteen hundred and twelve shall be charged to the proper appropriations as these stores are consumed from stock, and when disbursements made for all other purposes are accomplished, the amount so charged shall be returned to "General Account of Advances" by pay or counter warrants; Provided, however, that such material as provisions, clothing and small stores, medical stores, and such other materials as the Secretary of the Navy may designate, may be purchased by specific appropriations or transferred to specific appropriations before such materials are issued for use or consumption. The said charge, however, to any particular appropriation shall be limited to the amount appropriated therefor.<sup>16</sup>

The above act stemmed from the recommendations of a consulting firm hired by the Navy to study its whole supply and accounting system. The firm of Warwick, Mitchell & Co., Chartered Accountants of New York City also recommended other controls to be instituted by the Navy, and the next year Congress abolished the limitation on the amount of the fund by abolishing the fund itself and providing

<sup>15</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>History of the</u> Navy Stock Fund and Naval Supply Account, 1945, (Mimeographed) pp. 14-15.

<sup>16</sup>U.S., 36 Stat 792, Act of June 25, 1910.

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for the financing of the naval stock account directly from the general account of advances, a treasury holding account, equal to the total of all annual naval appropriations, which was established in 1879 to account for advances made to Navy disbursing officers in order to eliminate the necessity for making separate advances from each appropriation.

The permanent Naval Supply Fund created by the Act of March third, eighteen hundred and ninety-three, as modified by the Acts of ---- is hereby abolished, and of the sum remaining on the books of the Treasury to the credit of said fund after the adjustment of all liabilities, the Secretary of the Treasury is hereby authorized and directed to cause the sum of one million five hundred thousand dollars transferred to the credit of said fund from the General Account of Advances to be returned to General Account of Advances, and the remainder to be covered into the Treasury; and hereafter the Naval Supply Account for the Naval Establishment, as created by the Act of June twenty-fifth, nineteen hundred and ten, under the Bureau of Supplies and Accounts, shall govern the charging, crediting, receipt, purchase, transfer, manufacture, repair, issue, and consumption of all stores for the Naval Establishment, excepting the materials named in the Act and such other materials as the Secretary of the Navy may designate; Provided, that the amount expended under General Account of Advances for the purchase and manufacture of stores and materials for the Naval Establishment shall not exceed the amount available for such purposes.

It is important to recognize that this act assumed that all materials stocked would eventually be paid for by appropriations and that the "advances" from the General Account of Advances would eventually be repaid, thus the revolving fund principle was to remain in effect.

The expansion of forces necessitated by World War I was accompanied by a tremendous increase in inventories. As is usually the case during such an emergency, the momentum of the build-up outstripped the need and at the end of the war a surplus existed. As there was no foreseeable need for many of these supplies they were sold as excess but the revenue did not equal their book value. Congress was requested and found it necessary to appropriate moneys to offset these losses. A more serious problem existed, however. The total amount of moneythat could be invested in inventories could not exceed the total of

<sup>17</sup>U.S., 36 Stat 1279.

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the annual appropriations to the Navy. These appropriations were reduced sharply after the end of the war and the value of the usable stock on hand exceeded their total, thus creating an overdraft in the General Account of Advances. Congress was reluctant to pass appropriations to cover these deficiencies as eventually, it was hoped, they would be reduced by the revenues received from "sales." The obvious solution was to reestablish a stock fund which would act as a working fund, from which excess cash could be withdrawn from time to time until the total amount was equal to that needed for current operations. Under this plan new appropriations would not be required nor would the conversion of inventories into cash result in supplements to the appropriations which were passed for the support of the Navy. Congress accepted this solution and once again the Navy Stock Fund became a separate entity:

That deficiencies under appropriations for the Naval Establishment for the fiscal year 1920 and prior years shall be charged to a naval supply fund, which is hereby established and to which shall be transferred the unexpended balances of annual appropriations for the Naval Establishment for the fiscal year 1919 and 1920, after two years from the expiration of the fiscal year for which made, and out of any funds in the Treasury not otherwise appropriated, an amount equal to the value of all stores in the Naval Supply Account on March 31, 1921, preliminary adjustments on account of stores to be made upon the certificate of the Secretary of the Navy that stores to the value certified are on hand; and from and after said date the Naval Supply Account Fund shall be charged with the cost of all stores procured for and credited with the value of all issues or sales made from the Naval Supply Account, necessary adjustments being made on account of outstanding contracts or orders.<sup>18</sup>

The Act of March 1, 1921, quoted in part above, contained one other provision which was very important to the revolving fund concept:

The prices at which material is to be expended from the Naval Supply Account shall be fixed by the Paymaster General of the Navy, subject to the approval of the Secretary of the Navy, and materials purchased during the war shall be issued at reduced prices in all cases appropriate, such differences in values and losses to be charged to the respective funds; and hereafter no charges on this account shall be made to naval appropriations.<sup>19</sup>

<sup>18</sup>U.S., 41 Stat 1169 (Act of March 1, 1921).
<sup>19</sup>U.S., 41 Stat 1170.

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It was now to be recognized that losses due to the combination of price change and age were to be expected. These losses were not to be charged to operating expenses, however. If the revolving fund concept was to obtain, the price at which issues were made would have to include a surcharge to offset such losses or separate appropriations would have to be requested. Neither approach was considered necessary at the time. The total value of the fund as of 30 June 1921 was \$265,622,738, of which approximately \$250 million was invested in supplies. Both the Navy Department and Congress considered this amount excessive. It was planned that losses and reappropriations would be allowed to reduce the fund to a level more commensurate with the needs of the service. The economies put in effect during the 1930's upset these plans as far as the Navy was concerned. Congress and the administration thwarted every attempt to maintain the capital of the fund at the level the Navy considered necessary - equal to value of two years' stock. Congressional reappropriations and operating losses reduced the value of the fund to approximately \$70 million as of June 30, 1939.<sup>20</sup> This amount was pathetically insufficient to support the build up in forces which was to take place in the next several years. Congress was slow to approve any increases until the outbreak of World War II. Even then the "lid" was not removed completely. On 23 December 1943, Congress, on the recommendation of the Bureau of the Budget, established a \$2,250,000,000 limitation on the total value of the fund.<sup>21</sup> This "ceiling" was reduced to \$2 billion in May 1946.22

The ability to control the total investment in inventories through the use of the revolving fund concept impressed several of the committees established

<sup>20</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>History of the</u> Navy Stock Fund and Naval Supply Account, 1945, (mimeographed), pp. 40-63.

<sup>21</sup><u>Ibid</u>., p. 72. <sup>22</sup>U.S., 60 Stat 228.

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after World War II to study the organization of the government and to recommend organizational and procedural changes. The work of these committees resulted in the passage of Title IV of the National Security Act of 1947, As Amended,<sup>23</sup> Section 405 of which authorized the Secretary of Defense to "require the establishment of working-capital funds in the Department of Defense for the purpose of (1) Financing inventories of such stores, supplies, materials and equipment as he may designate." This act also required that reports of the conditions and operations of these funds "shall be made annually to the President and to the Congress." Since this time the monetary amount of the fund has been regulated through the regular budgetary and apportionment process.

The limiting of the amount of the fund in no way affects the revolving fund feature. The protection of this feature, however, affects nearly every operating policy. This relationship will be emphasized throughout the subsequent chapters.

### CHAPTER III

# CURRENT OFERATING POLICIES AND PROCEDURES

### General

Judgement is called for in order to avoid, on one hand, so much detail that it will be more confusing than informative or more costly than worthwhile, or, on the other, the development of a system whose only virtue lies in its simplicity.<sup>24</sup>

The development of operating policies and procedures for the Navy Stock Fund is a never ending process. In the previous chapter some of the "growing pains" of the past were reviewed. Before delving deeper into specific problem areas it is considered appropriate to review briefly the policies and procedures in effect today. It is predicted that these procedures will not remain static for long due to the dynamic nature of the organization which the Navy Stock Fund is designed to support and, more specifically, due to the proposals for change currently under consideration both within the Navy Department and within the Department of Defense. For this reason, and to spare both the writer and the reader, the following discussion will be very general in scope.

Administrative Organization

Control, however, of the use of that material is left with Congress. Only when Congress appropriates money for a job to be done can material be withdrawn, because it is on a "cash on the barrel head" basis. In other words, no one can use material from this fund unless Congress has provided money to withdraw it.

> W. J. McNeil Assistant Secretary of Defense (Comptroller)<sup>25</sup>

The purpose and nature of the Navy Stock Fund give an indication of the

<sup>24</sup>C.B. Nickerson, <u>Cost Accounting</u>, (New York: McGraw-Hill Bool Co., Inc, 1954), p. 83.

<sup>25</sup>U.S. Congress, Senate, Committee on Armed Services, <u>National Security</u> Act Amendments of 1949, (Washington: Government Frinting Office, 1949), p. 2669 \_

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functions it performs and the policies which must be established for guidance. The principal functions are financing, inventory control and accounting expediency. Policies have been established for each of these functions, the more important of which are inventory criteria, pricing, and budgeting. Budgeting, here refers to the planning required for the control of the fund itself and not the budgets prepared for the operation of the Navy, although the accounting required to support the Navy's operating budget is more effectively performed through the medium of the Navy Stock Fund.

The Navy Stock Fund is managed under the supervision of the Secretary of the Navy, "subject to the broad direction of the Assistant Secretary of Defense (Comptroller) with respect to fiscal management, and to the broad direction of the Assistant Secretary of Defense (Supply and Logistics) with respect to procurement and supply management."<sup>26</sup> Within the Department of the Navy a similar division of responsibility for policy direction exists. The Office of Naval Material is responsible for effectuating policies of procurement and for determining methods to be followed in meeting the material requirements of the Operating Forces as determined by the Chief of Naval Operations. The Comptroller of the Navy formulates principles and policies and prescribes procedures in the areas of budgeting, accounting and reporting.<sup>27</sup> The Chief of the Bureau of Supplies and Accounts administers and manages the Navy Stock Fund "in conformity with such policy statements, appropriate regulations and procedures as may be issued by higher authority.<sup>28</sup>

<sup>26</sup>U.S., Department of Defense, "Regulations Governing Stock Fund Operations," DOD Directive 7420.1 of December 19, 1956, p. 4.

<sup>27</sup>U.S., Navy Department, Navy Management Office, <u>Department of the Navy</u> Organization, NavExos P-861, July, 1960, pp. II-17, 19.

<sup>28</sup>U.S., Department of Defense, Department of the Navy, <u>Charter for the</u> <u>Navy Stock Fund</u>, BuSandA Instruction 7610.1 of 26 September 1955.

Within the Bureau of Supplies and Accounts the Assistant Chief for Supply Management is the Program Director for the Navy Stock Fund and is responsible for:<sup>29</sup>

1. Furnishing the Inventory Control Points with guidance and criteria such as:

- a. Format of Financial Operating Plan and justification
- b. Provisioning, sales projection replacement policy, investment levels, stratification, etc.
- Reviewing the Inventory Control Points' operating plans budgets, and financial plan.
- 3. Determining program requirements and preparing preliminary budget estimates.
- Presenting and justifying budget and allocation requests to review levels. (In conjunction with the Comptroller of the Bureau of Supplies and Accounts).

The comptroller of the Bureau of Supplies and Accounts provides the program director with guidance as to budget format and administration; consolidates and summarizes the budget; collects financial inventory control data; maintains financial records; and prepares quarterly and annual stock fund reports to higher levels outside the Bureau of Supplies and Accounts.

The Stock Finance Division of the Bureau of Supplies and Accounts is "Responsible for the guidance, formulation, presentation, implementation, and progress evaluation of inventory control point material program plans and for standard pricing policy and procedures."<sup>30</sup> The Stock Finance Division is responsible to the Assistant Chief for Supply Management.

Inventory Control Points (ICP) control and manage respective assigned categories of Navy Stock Fund Material. The major functions performed by them are "the determination of requirements, the procurement of requirements to meet

<sup>29</sup>U.S. Department of the Navy, Bureau of Supplies and Accounts, <u>BUSANDA</u> ORDER 2-1, 21 March 1961.

<sup>30</sup>U.S., Department of the Navy, Bureau of Supplies and Accounts, <u>Bureau</u> of Supplies and Accounts Organization Manual, 18 April 1961, p. OS-34a.

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to meet demands."<sup>31</sup> Below the level of the Inventory Control Points, the various field activities and ships manage the inventories under their custody in accordance with the policies and procedures issued by higher authority.

# Financial Control of the Stock Fund

Obligating authority is the currency used by the central administration of the Navy Stock Fund. It is allocated to the various inventory managers principally to provide for necessary replacement of sales. Planned buildup or draw-down of stocks are the major determinants of final allocations. The spread between contractual or obligating authority actually used and sales income returned to the fund is a most significant factor.<sup>32</sup>

The Navy Stock Fund is a separate business entity. Financial control of the fund is maintained in accordance with modern business practices through a budget which is prepared to support an operating plan. A double entry accounting system is utilized to record the data necessary for record purposes and for preparation of reports to management. The Navy Stock Account is simply the inventory of the "business." The cash portion of the fund is also commonly referred to as the Navy Stock Fund. (This can often be misleading). Control of this cash portion is maintained through the budget and the allocation and allotment procedure. Each year's sales and purchases must be estimated for justification of the budget. This budget is prepared in the Bureau of Supplies and Accounts on the basis of information submitted by the Inventory Control Points which estimate the total Navy requirements for the materials under their control. These requirements are justified on the basis of interpretations of the programs and stockage objectives issued by the Chief of Naval Operations, the cognizant technical bureau and other higher authority and on the basis of past demand and estimated changes therein, due to changes in planned Navy

<sup>31</sup>U.S., Department of the Navy, Bureau of Supplies and Accounts, <u>The</u> Navy Stock Fund, Annual Report, Fiscal Year 1958, NavSandA Publication 263, p. 3.

<sup>32</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>The Navy Stock</u> Fund, Annual Report, Fiscal Year 1958, NavSandA Publication 263.

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operations. The Inventory Control Points receive much of the required data from the various field activities which make up the distribution system.

The budget process is much the same as for the Navy's operating budget and the budget is subject to the same reviews and approvals, to apportionment after approval, and, in recent years particularly, to reservations. The Comptroller of the Bureau of Supplies and Accounts receives the allocations from the Navy Comptroller quarterly. These funds (authorizations to spend) are suballocated to the various Inventory Control Points on the basis of the previously approved budgets. Adjustments must be made, of course, for changes made during the approval and apportionment process and for changes in requirements that have occurred during the period that has elapsed since the financial and operating plans were submitted. The allocations and suballocations are actually obligation authorizations based on estimated reimbursements for issues through the end of the fiscal year plus an amount based on the provision of Section 645 of the Department of Defense Appropriation Act of 1954 which reads: "Obligations may be incurred against anticipated reimbursements to Stock Funds in such amounts and for such periods determined by the Secretary of Defense, with the approval of the Director of the Bureau of the Budget, to be necessary to maintain required stock levels not inconsistent with planned operations for the succeeding fiscal year, without regard to fiscal year limitations."33

The Inventory Control Points issue allotments to those field activities which require them for local procurement and operating expenses such as manufacture, repair and transportation that are properly chargeable to the Stock Fund.

<sup>33</sup>U.S., Department of Defense, "Regulations Governing Stock Fund Operations", op. cit., p. 30.

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Allotment and suballocation status reports flow back up the administrative organization from field activity to the Inventory Control Foint to the Bureau of Supplies and Accounts.

The system described above is just one of the controls on the Stock Fund and is an integral part of the entire Navy Accounting System. It is difficult and perhaps improper to try to segregate it; however, it is the one control that tends to conflict with the "pure" revolving fund concept by limiting the Stock Fund to an annual cycle.

## Stores Accounting

Stores accounting involves property, appropriation, and cost accounting for receipts of material into custody of a supply officer and expenditure of such material. The property accounting phase covers an analysis of receipts and expenditures by type under each stores accounts. The appropriation accounting phase involves an analysis of expenditures by appropriation and project order or allotment. The cost accounting phase is an analysis of expenditures by expenditure account classification and object classification.<sup>34</sup>

Volumes can and have been written on the Navy's Stores Accounting System. It is the heart of the Navy Accounting System. The inventories held in the Navy Stock Fund must be accounted for both by money value and by unit. In addition, it is necessary to maintain an accurate "locator system" and custodial responsibility. As these stores are issued to the various "customers" they present a "credit card" in the form of an authorization to charge their operating allotment. These "accounts receivable" are "paid" through the process of appropriation accounting. This eliminates the necessity for cash transfers and enables data to be collected on an orderly and Navy-wide basis. The entire system must provide data for internal management control in addition to the data required to

<sup>34</sup>U.S., Department of the Navy, Office of Comptroller, <u>Navy Comptroller</u> Manual, Volume 3, paragraph 034000.

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report to the Bureau of the Budget on budget status and to the Treasury on appropriation status. The cost accounting function is primarily for field activity management purposes but also provides the necessary information concerning the cost of operating certain activities and the object of expenditures i.e. - personnel, subsistance, etc.

Exhibit I presents in general form the principal records and reports required for maintaining control of the Stock Fund in the Naval Establishment. In addition the records and reports required for reporting the status of appropriations are shown for comparison purposes. The reports indicated go to the next higher authority. Most of these reports are accompanied by schedules and summaries supporting the entries thereon.

The financial reports prepared by the Eureau of Supplies and Accounts are submitted to the Office of Assistant Secretary of Defense (Comptroller) via the Navy Comptroller. These reports are described briefly below:<sup>35</sup>

<u>Statement No. 1.</u> "Statement of Financial Condition." This is comparable to a comparative balance sheet used in business. It is submitted quarterly and at the end of each fiscal year.

<u>Statement No. 2</u>. "Changes in Capital of the Fund." This might be compared to a combined income statement and statement of net worth. It is also submitted quarterly and annually.

<u>Statement No. 3</u>. "Summary of Cash Sources and Application and Cash Budgets." This is a combined cash flow statement and cash budget status report. It is submitted quarterly for control purposes, annually for budget estimates and as required for apportionment or reapportionment requests.

<sup>35</sup>U.S., Department of Defense, Assistant Secretary of Defense (Comptroller) "Financial Reports for Department of Defense Stock Funds", <u>DOD Instruction 7420.6</u> of September 19, 1961.

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EXHIBIT I THE NAVY STOCK FUND ACCOUNTING SYSTEM	NSA INVENTORY ACCOUNTING	REPORT				Status of Supply Inventories	Transaction Reporting Cards	
		RECORD				Stock Cards, Strati- fication Ledger,	Stock Cards	A & NRAO
	NSA STORES ACCOUNTING II	REPORT		Financial Statements 1 through 7	Consolidated Balance Sheet Consolidated FICR		Financial Financial Inventory Inventory Control Control Ledger, *Report(FICR) Stores #NSA Ledger Balance Sheet	*to ICP,BuSandA & NRAO #to NRAO
		RECORD		Bureau Approp. Control Ledgers	Summary Cards	Financial Control Records	Financial Inventory Control Ledger, * Stores # Ledger	,
	ANNUAL OPERATING APPROPRIATION ACCOUNTING	REPORT		Analysis of Appr. Status & Report on Budget Status	Bureau Acctg Registers		Allot. Status Report Analysis of Expen- ditures	Summary of Allot. Charges
		RECORD	Master General & Appropriation Cash Ledgers	Budget Acty. & Project Ledger	Summary Cards		Allotment Ledgers	Disbursing Records
	DNITNUC	REPORT		Report on Budget Status		Project Control Ledger Summary	Allot. Status Report, Recon. of Expend.	Summary Allot Charges
	NSF ALLOTHENT ACCOUNTING	RECORD	Master General & Appropriation Cash Ledgers	Bureau Approp. Control Ledger		Project Ledger	Allotment Ledgers	Disbursing Records
	ACTIVITY		NAVCOMPT	BuSanda	NRAO, ACCTG BRANCH	ICP	Field Activity	NRAO, Disb. Branch

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Statement No. 4. Inventory Status and Transaction Statement. This report is submitted annually to show the changes in the dollar amounts of inventories by major material category.

Statement No. 5. Operating Budget. Submitted annually, for annual budget estimates and as required for apportionment and reapportionment requests.

<u>Statement No. 6</u>. Reimbursable Issues (Net). The report is submitted quarterly to show the dollar amount of issues as compared with forecasted issues (sales) by the fund or appropriation to which they were charged.

<u>Statement No. 7</u>. Status of Budget Authority. This report is submitted on an annual basis to show the status of the obligation and commitment authority by material category.

At each level of control continuous reconciliation with records of other activities is required. Much of this reconciliation is performed on an area basis by the Navy Regional Accounts Offices (NRAO). These offices also make the payments for most of the material purchases and notify the accountable activities of the payments made. The reconciliation process acts as a control for the entire accounting process.

## Pricing

Standard pricing has been adopted for Stock Fund operations because of the advantages it provides over other inventory pricing methods in promoting uniformity, accuracy, and simplicity in both the accounting and inventory control functions and the resultant economy of administration. Standard pricing facilitates cross servicing, and prevents the use of different prices for materiel held for different purposes 36 mobilization reserve stocks as compared to operating stocks.

A standard price is developed for each item of material carried in the Navy Stock Account by adding a surcharge to the current market or production cost. The surcharge includes an allowance "to compensate the Stock Fund for

<sup>36</sup>U.S., Department of Defense, "Regulations Governing Stock Fund Operations", <u>op. cit.</u>, p. 11.

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all foreseeable net losses and authorized expenses relating to such item", the cost of "first destination" transportation and "in the case of single manager stock fund divisions, the additional transportation costs between single manager depots and from such depots to the consuming service inventory locations within the United States."37 The foreseeable losses to be recovered include such inventory losses as pilferage, damage, deterioration, obsolescence and physical inventory adjustments. Recovery of abnormal losses due to major disasters, enemy action or obsolescence on spare parts held for mobilization or economic reserve is not anticipated. The increased value created by manufacturing, processing or repair to be be added to the cost or appraised value of the item, in the case of materials returned to store for repair, when determining base price. "Standard prices shall be reviewed whenever necessary but at least annually with revisions to price lists issued as frequently as required by sound business practice."38 It is intended that the full cost of replacing Stock Fund inventories be passed on to Stock Fund customers without increase or reduction. In this manner the Stock Fund capital will be maintained and the non-profit, revolving fund concept will be adherred to.

In actual practice the surcharge has been insufficient to recover obsolescence. This fact and its effect on the Stock Fund will be discussed in a subsequent chapter.

## Inventory Management

Navy Inventory Managers are those organizational elements which are charged with the responsibility for inventory management. The policies and standards enunciated herein apply primarily to the inventory managers which include: the Bureaus, the Marine Corps, and those offices which

<sup>37</sup><u>Ibid</u>., p. 11. <sup>38</sup><u>Ibid</u>., p. 10.

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carry out decentralized inventory management functions as directed by the Bureau of Supplies and Accounts including the Supply Demand Control Points, The Navy Single Manager operating agencies, and the Navy Retail Offices... For items under his cognizance, a Navy Inventory Manager shall:

a. Have world-wide responsibility. Collect and maintain reports and data in quantitative and monetary terms as necessary to assure sound evaluation and control of inventory.

b. Determine the range and depth of items to be stocked at distribution system activities except for that material under the logistic control of Fleet Commanders.<sup>39</sup>

The determination of which items of material stocked is probably the most basic yet difficult policy decision which the managers of the Navy Stock Fund must make. This selection is, to the extent possible, made on a category of material basis. If the material is of the type that has a low demand and therefore a slow turnover, the revolving feature of that portion of the fund so invested is severely restricted. Material with high obsolescence characteristics can cause excessive inventory losses. Many of the most serious problems which have arisen in the administration of the Fund have involved determination of inventory criteria. Some of these decisions and their impact will be discussed in detail in the succeeding chapter.

Closely akin to the problem of inventory criteria is the determination of the quantity of stock to be financed. A merchandising firm determines both the variety and quantity of stock on the basis of past demand and estimated future need. Their objective is to maintain a high turnover and keep dead stock at a minimum. Their purpose is to "re-use" their investment as often as possible and thereby increase its utility. The Stock Fund has this objective also, but not as a primary one, although it would sometimes appear that this fact is overlooked. The material in the Stock Account is not only for the support of current operations but also for emergency use. Much of this material is

<sup>39</sup>U.S., Navy Department, Office of Naval Material, <u>Navy Policy and</u> <u>Standards for Inventory Management</u>, NAVEXOS P-1500, February 1960 revision, pp. 1-1, 1-2.

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required to keep the ships mobile, to maintain the military effectiveness of the Naval forces. In the event of war these materials will be particularly essential to support the increased operations and the expansion of the fleet. It is only prudent, therefore, that these stocks include quantities necessary to support some predetermined level of mobilization whether or not all the items are subject to fast turnover.

The inventories financed by the Navy Stock Fund are "stratified" in order to identify the purpose for which held. Annually, inventory managers compute peacetime operating and mobilization requirements in accordance with guidance issued by the Chief of Naval Operations and compare the results against stocks on hand. All stocks are then reclassified into one of the following categories:

- a. Peacetime Force Material
- b. Mobilization Reserve Material
- c. Economic Retention Stock: that portion of items in long supply which is considered economical to retain.
- d. Contingency Retention Stock: that portion of items in long supply which it has been determined will be retained for military or defense contingencies.
- e. Excess stock

The data so developed are required for budget and apportionment justification and are the basis of the annual operating plan.

There is one other important policy area which is concerned with inventory management. Inventory managers "do not stock or maintain material but exercise inventory management of the material to assure a proper balance between supply and demand required for the operation and maintenance of the Naval Establishment."<sup>40</sup> The materials are stored at the various supply depots and Naval

<sup>40</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>The Navy Stock</u> Fund, Annual Report, Fiscal Year 1957, NavSandA Publication 263, p. 3.

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activities throughout the world. Prior to World War II materials on board ship were also carried in the Navy Stock Account.

At the time of the attack on Pearl Harbor, ships afloat as well as activities ashore accounted for Naval Stock Fund stores in the same manner. In other words, the fund was reimbursed by charges to other appropriations as the material was issued. As previously pointed out this involved considerable paper work afloat and was not feasible in wartime so on February 1, 1942 the following act was passed (56 Stat 79): "Naval Supply Account Fund, \$160,000,000: Provided, That the value of the balances of supplies and materials on board Naval vessels on January 1, 1942 shall be expended from the Naval Supply Account as directed by the Secretary of the Navy, without charge to current appropriations."<sup>41</sup>

After World War II, the stocks of "general stores" carried aboard "ships with Supply Departments" were once again financed under the Stock Fund. The smaller ships, destroyers and smaller, carried Supply Corps Officers designated "Stores and Disbursing Officer." The stocks of materials carried on these ships were expended to end use and placed in the custody of the departments which had ordered them. The Korean War brought the usual attack on "paper work afloat" coupled with increased emphasis on the proposition that fleet inventories should be under the control of the fleet and stock funding of shipboard stocks was again abolished. It was decided that shipboard inventories of general stores and repair parts could be managed and controlled through the use of allowance lists and load lists. These stocks were charged to fleet operating funds when transferred to the ship. This procedure was also used on board fleet issue ships, tenders and repair ships. Appropriation accounting ended at "tidewater." When operating funds began to "feel the squeeze", stocks on board tenders and repair ships could not be maintained at levels commensurate with need. In 1955, stock fund type material carried on board fleet issue ships was again stock funded. The Annual Report of the Navy Stock Fund for Fiscal Year 1957 contained the following statement:

<sup>41</sup>History of Navy Stock Fund and Naval Supply Account, 1945, op.cit., pp. 69-70.

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Extension of Navy Stock Fund financing to Navy Stock Account type material carried aboard tender and repair type vessels is being considered for implementation in Fiscal Year 1958. The plan being considered will include Navy Stock Fund financing of loads carried aboard these type vessels for fleet support as well as the vessel's own allowance of material. Minimum essential records of inventory and transactions will be maintained by the tender or repair ship with stores accounting and reporting accomplished by designated shore activities. Fleet issue ships have been operating under the plan since 1 July 1955 and extension to tender and repair type vessels will bring all fleet support type ships under the same type procedure.

This plan is fully implemented today and, of course, has revived suggestions to consider the further extension of stock funding to all fleet units.

Each extension of this type extends the authority and responsibility of the inventory managers and the Bureau of Supplies and Accounts into the traditional line responsibility areas. The ramifications of such decisions are considered to be of such importance that they will be discussed in detail in a subsequent chapter.

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### CHAPTER IV

### THE PROBLEM AREAS

# General

Resources are always limited in comparison with our wants, always constraining our action. If they did not we could do everything and there would be no problem of choosing preferred courses of action. We should therefore inquire into the constraints that exist.<sup>42</sup>

There are many limitations in the use of any managerial tool. The Navy Stock Fund is certainly no exception. The problem of management is to design the tool so that it best serves their requirements.

The principal areas of difficulty that have faced the management of the Navy Stock Fund since its inception are so interrelated that it is difficult to discuss them separately. In addition to affecting and being affected by the revolving fund concept, these problem areas are influenced, and influence the organization of the Navy logistic support system and the operating doctrines of the combat forces. It is considered appropriate, never-the-less to examine these areas individually in order better to identify and understand the restraints that are inherent therein.

The Criteria for Items to be Financed by the Navy Stock Fund

The Navy has had a difficult time in determining the proper extent of use of the Navy Stock Fund. In the past its use has been confined to procurement of general consumables of a rapid turnover nature which were used by two or more bureaus in the Navy. Later the fund also became the medium for miscellaneous accounting adjustments and for financing procurement as a medium of clearance on an immediate expenditure basis of a wide range of general and technical supplies.

Following World War II, a comprehensive study of the entire Navy supply system was inaugurated, based on World War II experience. The recommendations of those making the study were incorporated in a document known as the Navy Supply Plan.

<sup>42</sup>Hitch, Charles J. and McKean, R.N., <u>Economics of Defense in the</u> Nuclear Age, (Harvard University Press, 1960), p. 23.

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The Navy Supply plan proposed a single fund procurement as the most efficient method of obtaining and maintaining replenishable stocks.... The great benefit of this single fund/single account approach for replenishable stores was felt to be the simplification of stores accounting and reporting in the field, and the separation of procurement and stocking program account from operation and project accounting.... It was felt that it would eliminate some restrictions on the use of Navy stores and assure a maximum turnover of inventory....

The Navy Stock Fund and Navy Stock Account had all the essentials of such a single fund and single account, but the plan was never fully implemented in this respect. The ramifications of extending the NSF/NSA structure to include all replenishable stocks used by the Navy are many and include many real hazards to the operation. Two basic problems under this concept would be (1) how to safeguard the fund and (2) how to administer efficiently and control the fund effectively if it were to be employed on such a wide and varied basis.<sup>43</sup>

The implications of the above statement are obvious. If the Navy Stock Fund is to be a true revolving fund the stockage criteria must be compatible with this concept. The early legislation, quoted in previous sections, used such terms as "ordinary commercial supplies", "all stores on hand except such materials as the Secretary of the Navy may designate", or simply "all stores." The Judge Advocate General has, from time to time, been requested to make rulings to settle disagreements as to the meaning of these terms<sup>44</sup> or to determine the legality of extending the use of the fund to such categories of materials as provisions and clothing and small stores.<sup>45</sup> The concept of a self sustaining fund has been the prime argument against the extension of its use to materials with low turnover rates. On the other hand, the lack of any other convenient method of financing has, in the past, made it a sort of "catch-all." The desire to increase and centralize the controls over Navy inventories coupled with the growing need for more accurate and timely cost of operation information

<sup>43</sup>Hempstead, John W. "A Study of the Navy Stock Fund, 1893-1952", (unpublished Master's thesis, The American University, Washington, D.C., 1953), pp. 115-116.

<sup>44</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>History of the</u> Navy Stock Fund and Naval Supply Account, 1945, op. cit., pp. 26-28.

45<sub>Ibid.</sub>, p. 29.

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has gradually increased the range of the materials carried in the Navy Stock Account and financed by the fund. This growth in responsibility, accomplished only after considerable investigation and controversy, has increased both the complexity and the magnitude of the problems of management.

The principal period of growth has occurred since the Korean War. On December 31, 1950, the Clothing and Small Stores Fund was merged with the Navy Stock Fund.<sup>46</sup> On June 30, 1952 the inventories of medical and dental supplies were capitalized into the Navy Stock Account.<sup>47</sup> The financing of electronic items and other small groups of items considered to be in "common use" was shifted from the Appropriations Purchase Account<sup>48</sup> during the next several years. In 1955 an "Ad Hoc Committee to Examine Methods and Procedures for Material Requirements Determination and Budgeting therefor" made the following observations and recommendations in regard to the extension of the use of the Navy Stock Fund.

1. The Committee believes that the Navy Stock Fund should be extended to the APA spare parts inventories. This should eliminate many of the shortcomings in the present requirements computations, budget preparation and management relationships.

2. The Stock Fund should have the following major advantages:

- a. Parallel management and funding responsibilities.
- b. Provide for a consumption type budget rather than a stock inventory budget.
- c. Balancing of mobilization reserve stocks between inventories.
- d. Determination of financial requirements of the SDCPs (Supply Demand Control Points) can be on a more current basis, closer to the time the annual Defense budget is submitted to Congress.
- e. Simplify the accounting for material issued from the inventories and returned to store -- all such operations will be from one fund.

45 Hempstead, op. cit., p. 54.

47 Ibid., p. 58.

<sup>48</sup>As the name implies, a stores account is used to account for material purchased by annual appropriations until the material is actually issued for use.

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It is appreciated that the inclusion of all items of SDCP inventories except those few referred to above will represent a departure from the original concept that only items of a "replenishable demand" nature are suitable for incorporation into the Fund. The concept of "replenishable demand" type material must be broadened to encompass a more modern concept that items which have an "expected demand" are suitable Stock Fund material. This concept recognizes that all items to be included are not necessarily subject to rapid turnover, and that the rate of stock turn cannot be used as a measure of the effectiveness of management when applied to the gross inventory valuation.<sup>49</sup>

The recommendations of this committee were in direct conflict with the plans of the U.S. Air Force as expressed by the Assistant Secretary of the Air Force before the Preparedness Subcommittee, United States Senate, only two years earlier.

We do not conceive of the necessity or desirability at this time of placing technical supplies such as aircraft spare parts in the Stock Fund.<sup>50</sup>

The Assistant Secretary of Defense, W. J. McNeil, testifying before this same committee also expressed criteria quite different from that proposed in the ad hoc committee's recommendation:

So far it has not been contemplated to put capital items or items that were not strictly standard stock commercial, consumption type items, into stock funds.<sup>51</sup>

It has taken a lot longer than the two years anticipated for the "original concept that only items of a replenishable demand nature are suitable for incorporation into the Fund" to change. It was a process of evolution. It has taken longer than two years for the new concept of "expected demand" to be accepted. Many items that meet this criteria are still not funded under the stock fund. The trend was on, however. The most notable exception being the

<sup>49</sup>U.S. Department of the Navy, Office of Analysis and Review, <u>Findings</u> and <u>Recommendations</u> of the Ad Hoc Committee to <u>Examine Methods</u> and <u>Procedures</u> for <u>Material Requirements</u> <u>Determination</u> and <u>Budgeting Therefor</u>, <u>1955</u>, (Multilith)</u> (Unclassified portion) pp 1-11 & 111-85.

<sup>50</sup>U.S., Congress, Senate, Committee on Armed Services, <u>Implementation of</u> of Title IV, National Security Act of 1947, As Amended, (Washington: Government Printing Office, 1954), p. 96.

<sup>51</sup>Ibid., p. 127.

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\$2.3 billion of aviation repair parts that are still carried in the Appropriations Purchase Account because, it is contended, that when they are needed and available, the lack of operating funds should not preclude their use.<sup>52</sup> The Annual Report of the Navy Stock Fund for 1955 states:

In response to the Navy's formal request for extension of the Navy Stock Fund, a procedure specified in the report of the House Appropriations Committee in the Fiscal Year 1956 budget, the Committee has recommended that the plan for extension of the following categories be incorporated in the Navy budget for Fiscal Year 1957:

(Various categories of spare parts and photographic material totaling approximately \$737 million in value).

The existing plans for this extension contemplate the transfer without reimbursement of the listed inventories and the adjustment of consumption budgets to reflect the required payments for the material in Fiscal Year 1957. Under these plans, the existing cash of the Navy Stock Fund and the ability to anticipate reimbursements should be sufficient to handle the increased procurement required to support the added categories.<sup>53</sup>

At about the same time the above report was published the Department of

Defense issued the following policy guidance:

A. Authorized Inclusions .--

1. All materiel procured and/or stored for supply purposes. This is intended to include all consumable types of materiel and relatively minor items of equipment, including parts and components used in the manufacture, assembly, maintenance or rebuild of end-items for the military supply system. The term "consumable" material is used in the sense of covering all materiel which may be considered to be expended to operating and maintenance appropriations when withdrawn from stock funds for use. However, no hard and fast definition may be drawn.<sup>54</sup>

The last sentence couldn't have been more aptly put. Less than a month later, the criteria that is in effect today, was issued. The current criteria, quoted in pertinent part below, evidences the ever-present concern for the

<sup>52</sup>U.S., Navy Department, Office of the Comptroller, <u>Financial Report</u>, Fiscal Year 1961, NAVEXOS P-1170, 20 October, 1961, p. 24.

<sup>53</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>Annual Report</u>, Fiscal Year 1955, The Navy Stock Fund, (NavSandA Publication 263), pp. 14-15.

<sup>54</sup>U.S., Department of Defense, "Principles to be Observed in Determining Materiel to be Included in Stock Funds", DOD Instruction 7420.5 of 26 November 1956.

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### revolving fund concept:

- B. In accordance with Section III, the basic criteria for determining categories of items to be financed in any Division of the Stock Fund are the facts that: (1) The cost of items of such categories when issued for use are chargeable to a number of consuming activities; or (2) the items of such categories are held primarily for sale to personnel of the department or personnel of other agencies of the Department of Defense.
- C. In general, there must be a recurring demand for the items of any category of materiel held by a Stock Fund so that the Stock Fund investment therein shall not become frozen. This is sometimes referred to as the "general prudential rule."
- D. Generally, the items which may be included in Stock Funds shall be confined to those held for issue for supply purposes and not extended to include those held for capital investment or for use. In this connection the following types of items shall be excluded.
  - Real estate, installed equipment, industrial and similar machinery and equipment issued and in use or held in stores for future use.
  - 2. Aircraft, ships, tanks, military type vehicles, artillery, and similar items.

Although it is difficult to draw a specific line, this paragraph shall not be construed to prevent including in Stock Funds components of the foregoing items or relatively minor items of equipment, if there is a recurring demand for them, so long as they are held in stores and are not for use.<sup>55</sup>

The expansion of the Navy Stock Fund to other categories of material has continued up to the present time. There have been funding difficulties but, in most instances, where the expansion was planned and programmed in advance the difficulties have been mostly administrative. There have been financial "squeezes", however, that have resulted indirectly from the decision to transfer spare parts from the Appropriations Purchase Account to the Navy Stock Fund. Probably the greatest single indirect cause for the shortage of procurement funds has been technological advance. The spare parts required for the new and

<sup>55</sup>U.S., Department of Defense, "Regulations Governing Stock Fund Operations", <u>DOD Directive 7420.1 of 19 December 1956</u>, p. 9.

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complex equipment that has become commonplace in our fleet in the past ten years are much more expensive and numerous than those required for the equipments replaced. The exotic materials required for the equipments that make up our nuclear propelled submarines and their missile firing batteries are extremely costly. The transition from old to new is step by step procedure and during this period adequate stocks of spare parts to support both the new equipments and those being replaced have to be maintained.

The advent of single managers for procuremant and wholesale distribution of common defense commodities resulted in a further extension in the use of the Navy Stock Fund. Here was a different type of expansion, however, The range of items carried was undoubtedly increased, but it was the quantity of items which caused the greatest increase in capitalization.

Throughout this entire period of expansion the total value of the Navy Stock Fund has been decreased 12.5%. The following data, taken from the Annual Financial Reports for the Years 1954 through 1961, indicates that contrary to

#### EXHIBIT II

NAVY	STOCK	FUND, FI	NANCI	AL :	SUMMARY	1954-1961	
		(Million	s of I	D01	lars)		

Year End	Congressional Appropriations	In <b>ven</b> tories Capitalized	Operating Results	Misc Charges	Capital Balan <b>ce</b>
And	Appropriacions	Vapitalized	RESUILS	Unarges	Balance
1953	-				2,379
1954	-250	5	89	-27	2,191
1955	1200	114	-126		2,379
1956	-429	81	- 69	- 3	1,959
1957	-300	928	7	2 3	2,597
1958	-100	100	-143		2,454
1959	-120	59	-224		2,169
1960	- 75	363	-222		2,235
1961	- 75	80	-240		2,000
TOTALS	-1149	1,725	-928	-27	

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the expectations and the currently held opinions of many persons familiar only with the fund's expansion, the increased capitalization resulting from the "donation" of Appropriation Purchases Account material has not increased the fund's operating capital. Congressional recisions combined with operating losses have more than offset the value of the inventories that have been capitalized.

The capitalization of repair parts inventories had the immediate affect of generating surpluses and items in long supply. Even though these materials had been subject to Navy-wide reporting and centralized inventory management since the establishment of the Integrated Supply System in 1947,<sup>56</sup> there had been no compelling reasons to eliminate the surpluses that existed. Storage space was available and the materials were paid for. They represented both operating and capital assets which could be utilized to supplement operating funds. Upon capitalization into the Navy Stock Fund, they became subject to the revolving fund concept. These stocks, if not active, reduced the efficiency of the system and it was no longer economically feasible to retain them. Hence many were declared excess and sold. The losses were absorbed by the fund.

Congress, on the other hand, apparently felt that, in spite of these losses, the money which had been appropriated to purchase these materials originally should be returned to the Treasury or made available for other uses by reappropriation. The net result is that today the supply of a considerably greater number of items has to be financed with less capital. In 1954, there were approximately 260,000 items carried in the Navy Stock Account.<sup>57</sup> There were approximately 807,000 items stocked in the Navy Stock Account on 30 June

<sup>56</sup>For a general report on the Integrated Supply System see "Supply Support of the Navy", NavSandA Publication 340, 15 September 1957, pp. 17-19.

<sup>57</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>The Navy</u> <u>Stock Fund</u>, Annual Report, Fiscal Year 1957, NavSandA Publication 263.

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e \* e \* \* \* \* \* e \* e \* \* \* 1960.<sup>58</sup> This tremendous increase, occuring during a period of rising prices due to both inflation and technological advance, gives some indication of the impact that the reduction in working capital has had on the operation and management of the Navy Stock Fund.

Part of the reduction in capital was certainly justified. Materials had accumulated during World War II and the Korean War which were obsolete. Inventory management techniques had improved; inventories had been centralized, better identified, and catalogued; mechanization of inventory records had increased efficiency. The benefits derived from these improvements in inventory management procedures were offset to some extent, however, by the introduction into the system of more and more slow moving insurance-type items. Initially, the withdrawal of funds each year and the high operating losses did not seriously curtail operations. Cash was generated by the "eat-down" of items in long supply. As demand reduced the inventories of items in this category the funds so recovered were used to finance peacetime operating stocks. By 1958, however, more serious results were being reported:

The ability to maintain a favorable spread between sales and obligating authority is constantly decreasing as usable material in long supply is depleted. In addition to utilization of long supply the gap between sales obligation authority caused the consumption of some mobilization stock without replacement.<sup>59</sup>

During the period 1954-1961, the value of the peacetime operating stocks increased from \$338.4 million to \$536 million. The value of economic retention stocks decreased from \$354 million to \$217 million during these same years and mobilization reserves decreased from \$811 million to \$582 million.<sup>60</sup> One result

<sup>58</sup>Ibid., Fiscal Year 1960, p. 3.
 <sup>59</sup>Ibid., Fiscal Year 1958, p. 9.
 <sup>60</sup>Ibid., Fiscal Years 1954-1961.

of such reductions in mobilization reserves has been similar to the situation that existed during the 1930s.

It was pointed out that as of September 30, 1934 the total value of the fund amounted to \$67,243,000, a decrease of \$18,209,000 from June 30, 1929. In connection with this decrease Admiral Peoples stated "Experience since 1930 has proven the harmful effect of making such drastic reduction in Naval Stocks, which are of vital importance to the efficiency of the fleet. Certain material required for immediate operation and upkeep and for current construction of new vessels had to be procured, hence the only curtailment possible was to reduce the stocks of general stores carried for issue and reserve. As a result the minimum emergency reserve stock of many items is entirely depleted.<sup>61</sup>

Another effect of increasing items funded by the Stock Fund and decreasing the wherewithal has been an increase in "stock-outs", or in management report terminology, a decrease in effectiveness. A typical report of this result reads as follows:

Electronic effectiveness has declined from 87 percent last year to 78 percent by the end of FY 1961. Accelerated replenishment of allowance and load lists, and the impact on ashore supply outlet stock levels of fully stocking tender and repair ships, have been the major causes of the decline. In addition, the Electronics Supply Office has not been able to convince OSD (Office of Secretary of Defense) and Bureau of the Budget authorities of its funding requirements for provisioning of material. Consequently, apportionments have been reduced below the levels requested by the Navy.<sup>62</sup>

Although such an effect must obtain from the point of view of the Inventory Manager, the customer is rarely sympathetic. He has a mission to perform and to do so he must have materials when he needs them. He, too, is working under a tight budget and often finds it necessary to delay purchases of repair parts for inventory replacement until funds are available. His need for these unreplaced parts is unpredictable, however, and when he orders one of them which is required for immediate use, it is of little interest to him that

<sup>61</sup>History of the Navy Stock Fund and Naval Supply Account, 1945, <u>op. cit.</u>, pp. 57-58.

<sup>62</sup>U.S., Navy Department, Under Secretary of the Navy, Office of Analysis and Review, Navy Program Progress Report, 20 August 1961, p. S&A 3.

the Inventory Control Point didn't have the capital to carry a sufficient quantity of the desired part to supply each echelon of the supply system. Communications systems go into operation, fast and expensive methods of transportation are utilized, the part is supplied but the effort expended is often excessive and the human relations indicator between the operator and the supplier never quite returns to the same level as before.

The pressure on the Inventory Manager to improve his distribution and therefore his service while reducing his overall inventory investment has not gone unheeded. As previously pointed out, the cost of transportation from the commercial supplier to the point of initial storage is charged to the Stock Fund. At the time of purchase the supplier is instructed to divide his shipments in accordance to a predetermined distribution plan based on the stock status reports received from the various supply activities. Usage based on past experience or any other criteria is not one hundred percent accurate. Ships are mobile and transfer from fleet to fleet. Total system requirements may have been estimated very accurately, but the material is just not where it is now needed. The Inventory Manager is made aware of this by these same stock status reports. If the shortage of Stock Fund cash limits or prevent a purchase, stocks may be redistributed anyway, even though carefully calculated formuli indicate it is not economically sound to do so, as the cost of transportation for redistribution is not charged to the Stock Fund.

When it can be predicted with reasonable certainty that excesses can be "eaten down" at the place where held, the cost of holding such excesses while buying new stocks for another location is normally less than the cost of redistribution and ultimate replacement at the first destination.<sup>63</sup>

The requirement for material readiness often prevails. This is not

<sup>63</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>Cost Con</u>siderations in Management and Procurement of Navy Inventory, November 1956, p. 2.

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false economy, it is a necessity, for readiness is the very reason for the existence of a military logistics system.

A detailed analysis would be required to determine the extent that this expedient is used to escape from the severe restrictions on the Stock Fund's operating capital. Logically, however, since most shipments are made to tidewater facilities on initial procurement, one could expect the cost of reshipment within the United States to be relatively low in comparison to the cost of shipments on initial procurement. During Fiscal Year 1962, however, the obligations for redistribution of materials other than petroleum by the Inventory Control Points totaled \$12.4 million. The obligations against the Stock Fund for shipment of materials on procurement totaled \$7.7 million during this same year.<sup>64</sup> The total expenditures for materials during FY 1961 totaled \$1,162 million, while issues or sales totaled \$1,229 million.<sup>65</sup> This latter amount is no measure however, of the value of the materials redistributed. It simply gives an indication of the total amount of material which must be transported from the depots to the user, while redistribution is the transferring of materials between storage locations.

Another indication of the concern about the shortage of working capital funds in the Navy Stock Fund is the comprehensive review that is currently being made of the criteria for items to be stocked. It is interesting to note that the emphasis has been changed to "Criteria for Exclusion of Items for the Stock Fund."<sup>66</sup> The preliminary reaction to this proposed criteria has been as

<sup>64</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>Budget Plan</u> and Progress Report for Management, Appropriation O & M Navy - Servicewide Supply, 30 June, 1961, p. 6.

<sup>65</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>Navy Stock</u> Fund, Budget, Fiscal Year 1963, 13 October 1961, p. 99.

<sup>66</sup>U.S., Navy Department, Office of Navy Material, <u>Proposed SecNav</u> <u>Instruction 7113</u>, February 7, 1961.

varied as the respondents. Generally speaking, most of the Inventory Managers are of the opinion that the proposed criteria would result in considerable decapitalization, a reversal of the trend that has been so evident since World War II. The replies to the request for comments all testify to the recognition of the interrelationship of such criteria and funding. One of the more cogent replies included the following comments:

Based on the experience of (this activity), the perennial problem in obtaining required funds in NSF is that of combatting the merchandising stock-turn philosophy that is imbedded in the higher budgetary review levels, particularly in the area of insurance items, which may generate few or no sales .... Whether switching a portion of the NSF budget to Appropriation Purchase Account (APA) budgetary channels will result in greater recognition of funding requirements and a corresponding increase in funds granted appears a moot question. The "frame of reference" of high budget officials is the key factor. As fleet commanders are presently faced with rather severe funding shortages in the repair parts area and evidently have been unable to convince technical Bureaus of the importance of funding these shortages, it appears highly improbable that shifting the budgetary onus from the fleet commander to an inventory control point would result in more adequate fund grants; i.e., if operational commanders directly responsible for fleet readiness cannot break the budget "block" on repair parts funding it is certainly illogical to expect an organization several echelons removed from the "front lines" to be more successful.<sup>67</sup>

#### Obsolescence

The fact that obsolescence is a cost is well known generally, but broadly speaking, it is not recognized in budgetary parlance. New programs are funded, and disposal actions purge excesses from the system -- on the one hand it is modernization and on the other, good inventory management -but the fact remains that obsolescence is a continuing and a well-concealed cost.<sup>68</sup>

Modernization, technological advance, progress -- to the Inventory

Manager these words all mean the same -- material excesses. During World War

II the battleship became obsolete, in the opinion of many Navy strategists, as

<sup>67</sup>U.S., Navy Department, Electronics Supply Office, Letter serial 8-26 of 20 September 1961.

<sup>68</sup>U.S., Navy Department, Office of Analysis and Review, <u>Finding and</u> <u>Recommendations</u> of the Ad Hoc Committee to Examine Methods and Procedures for <u>Material Requirements Determination and Budgeting Therefor</u>, 1955, <u>op. cit</u>., p. III-88.

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a weapon suitable for modern warfare. At the present time there is much talk about the future use of manned aircraft, the Waterloo of the battleship. These changes are widely discussed and are recognized by the operator, the planner and the budget approval authorities alike. Stock Fund Inventory Managers need not concern themselves about these capital items but they must try to foresee the effect of such changes on Navy Stock Account inventories in order to comply with the current pricing instructions quoted in pertinent part below.

The stock pricing branch of each inventory control point establishes, reviews and promulgates fixed standard unit prices by items for stock under its cognizance... Item standard prices are computed first by determining replacement cost and secondly applying surcharges for transportation or losses, or both, to this base.... Item standard prices will be reviewed annually, or more frequently, except that no review is required for items with no procurement requirements....

Foreseeable Losses and authorized expenses. This element represents the amount necessary to compensate the Navy Stock Fund for foreseeable losses and authorized expenses. Loss surcharge rates are established by BUSANDA after consultation with each ICP or Navy single manager operating agency, and are applied to current material cost. Foreseeable losses include pilferage, shrinkage, damage, deterioration, obsolescence, destruction by fire, disposal, and physical inventory adjustments, but exclude abnormal losses caused by major disaster or enemy action, and operating losses on material on hand 1 July 1957 or date of capitalization under the Navy Stock Fund, which ever was later.<sup>69</sup>

The above instructions implement the following policy directive issued

by the Department of Defense:

Normally the surcharge rates should be established to include potential losses on all current purchases. Potential losses on stocks on hand, acquired previous to the establishment of such rates, should not be considered as a factor in establishing current surcharge rates for any type of stocks -- operating stocks, reserve stocks, or excess stocks. In addition, in event a surcharge rate would be unreasonably high because of high estimated potential losses on current procurement of mobilization reserve stocks, it will be permissable to establish a reduced rate, provided the surcharge rate for each category or class to be established shall include, as a minimum, estimated future losses on current purchases of operating stocks.<sup>70</sup>

<sup>69</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>BuSandA Manage</u>ment Handbook, NavSandA Publication 285, 2 November 1961, pp. 4-55, 4-56.

<sup>70</sup>U.S., Department of Defense, "Regulations Governing Stock Fund Operations", <u>op. cit.</u>, p. 16.

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Hence the exception in the previously quoted pricing instruction for stocks on hand 1 July 1957, or capitalized after that date.

Prior to 1 July 1957, the regulations in effect were interpreted to be much less stringent and the surcharge application was only nominal. Also the material carried in the Stock Account was, generally speaking, much less subject to the ravages of technological advance because the great bulk of it was made up of common use items of a consumable nature. The decision to transfer repair parts to the Navy Stock Account effective 1 July 1957, 71 was accompanied by the decision to make these surcharges more realistic in order to protect the capital of the fund. The surcharges established in 1957 ranged from.06% for fuel to 5% for repair parts.<sup>72</sup> These charges were to cover all losses; the portion applicable to obsolescence was considered to be that amount in excess of 1%. An allowance for obsolescence was not considered applicable to fuel. There was little if any recorded experience on which to base the establishment of a surcharge rate. The 5% rate for repair parts was arrived at on the basis that the serviceable life of a ship is normally considered to be 20 to 25 years, and therefore there would be an opportunity to sell these items for that length of time. 73 As the capital of the Stock Fund continued to decline through operating losses and declaration of surpluses and the recisions of cash coupled with apportionment reservations continued to reduce operating fund, more emphasis was placed on recovery of losses from surcharges. That portion of the Fiscal Year 1961 surcharges identified as applicable to obsolescence ranged from 0% for fuel to 8.7% for electronics repair parts to

# <sup>71</sup>Supra, p. 29.

72U.S., Navy Department, Bureau of Supplies and Accounts, <u>The Navy</u> Stock Fund, Annual Report, Fiscal Year 1957, NavSandA Publication 263, p. 14.

<sup>73</sup>Interview with B.B. Shea, formerly Head, Stock Pricing Division, Bureau of Supplies and Accounts, March 27, 1962.

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14% for ordnance repair parts. 74

There is considerable controversy over the application of surcharges for obsolescence. The range of opinion has varied from "The rapid advances made in electronics require a crystal ball gazer to foretell the rate of obsolescence of equipment and repair parts at the time of provisioning action (initial procurement to support a new equipment). The electronics design and development laboratories are trying hard to keep up with - and threaten to surpass - the science fiction writers in development of new equipments and new field for application of electronics"<sup>75</sup> to the more formal recommendations appearing in reports of investigative committees:

It is recommended that losses to the fund resulting from obsolescence of material be replaced to the extent required, by direct Congressional appropriation augmenting the fund.... The inclusion of a factor in computing standard prices which would result in the recovery of obsolescence costs would have a serious detrimental effect on the user of Navy Material. Recovery of obsolescence by standard pricing would increase the Navy price of an item to such an extent that the user would feel the price to be exorbitant, and would signify to him gross inefficiency or impropriety of the Supply System.

An illustration of the impact on standard prices of any attempt to recover during a given period the cost of material transferred to surplus during the same period can be seen from a comparison of the dollar value of the transfers of material by the Aviation Supply Office to Class B270, with sales of the same period. ASO transferred \$198,000,000 worth of inventory to the disposal class between 1 July 1954 and 31 December 1954. During the same period ASO sales were \$220,000,000. Recovery of obsolescence costs by increased prices on the items sold would increase prices of these items by 90 percent.

It is recognized that in actual practice recovery of obsolescence costs of a period could not be obtained from sales (issues) of the same period, since an obsolescence factor would more probably be assigned to the price of all items of the inventory. This procedure would not provide for recovery of the obsolescence costs, since many items do not sell during a given period, and many are eventually disposed of as surplus. For those items of an insurance nature, whose movement is extremely slow, the

<sup>74</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>Navy Stock</u> Fund Budget, Fiscal Year 1963, 13 October 1961, pp. 108-109.

<sup>75</sup>Report of Electronics Supply Office Regional Conference, 17-18 October 1956, quoted in C.A. Raymond, Jr., <u>Expected Supply Management Results of Navy</u> <u>Stock Fund Expansion</u>, (Unpublished Professional Paper in Supply Management, Bureau of Supplies and Account Library), p. 20.

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assignment of absolescence factors in the price would pyramid until over a period of months or years the standard price would become completely ridiculous.<sup>76</sup>

The above comment, while lengthy and relatively old, reveals the real problems involved in pricing obsolescence. Period by period recovery is impractical. All materials declared surplus are not obsolete. Many items are in excess of the needs of the Navy as set forth in policy directives on inventory levels. These policies change in accordance to National policies, international tensions, Naval Strategy and availability of funds. Some of the items have undoubtedly been procured in excess of needs through errors in judgement and plain every-day errors. Secondly, these same items that are declared surplus were expected to recover their portion of obsolescence. They have now been declared excess and their book value, inflated by the surcharge, must also be recovered.

The present method of establishing surcharges for obsolescence is a compromise. The standard price includes a factor applicable to an entire category of material and is normally applied only to those items procured for peacetime operating stocks. Unofficially, the fear of excessive prices has established a limit of 15% for all surcharges. All ships and Naval activities have some local procurement authority and must have. If the price of an item is higher than the price for the same item from a commercial source, the temptation to purchase locally is inversely proportional to the availability of operating funds.

The effectiveness of obsolescence surcharges is nearly impossible to measure. It is estimated that approximately \$12.2 million was recovered from such charges in Fiscal Year 1961 while the amount of obsolescence that occurred

<sup>76</sup>U.S., Navy Department, Office of Analysis and Review, <u>op. cit.</u>, p. III-89.

was reported at approximately \$271.6 million.<sup>77</sup> This was the amount of excess material written off, which is no more useful as a measure of the effectiveness of such charges than it is as a measure of the amount that needs to be recovered. The time lag between the procurement of an item and its becoming obsolete varies from one year to twenty or more years.<sup>78</sup> An average of all excess declarations over a period of years can be estimated and once the system is purged of stocks procured prior to 1 July 1957, a relatively stable relationship between recovery rate and loss could be maintained, but in the meantime the Fund's capital will continue to decrease.

Credits for Material Returned to Stock

The appraised value of all stores, supplies, materials, and equipment returned to (a Stock Fund) from any department, activity, or agency may be charged to the working-capital fund concerned and the proceeds thereof shall be credited to the current appropriations concerned; the amounts so credited shall be available for expenditures for the same purposes as the appropriations credited.<sup>79</sup>

The above regulation is not applicable to material returned to the Stock Account which is in excess of requirements as determined by the cognizant Inventory Control Point. It is the cause of considerable controversy, and requires constant policing and explaining. In order to understand all its ramifications a short explanation of the Supply Overhaul Availability Program (SOAP) is required.

Each ship in the Navy has been issued an allowance list showing the quantities of repair parts that should normally be carried on board ship for

<sup>77</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>Navy Stock</u> Fund Budget, Fiscal Year 1963, 13 October 1961, p. 110.

<sup>78</sup>Forms, for example may be changed within a year after initial issue, while propulsion plant equipment gears may remain the same for the life of a ship.

<sup>79</sup>U.S., Department of Defense, "Regulations Governing Stock Fund Regulations", <u>op. cit.</u>, p. 21.

maintenance and repair purposes. These stocks are not carried in a stores account. Each ship is scheduled for a supply overhaul availability period "during which actual shipboard stocks can be brought into agreement" with these allowance lists.<sup>80</sup> This overhaul period is normally scheduled as an extension of the ship's regular overhaul which is scheduled every one to three years depending on the ship type, its operating schedule, the availability of funds. etc. During Fiscal Year 1961, approximately 350 ships received a supply overhaul. The dollar value of the repair parts carried on these ships in excess of the allowance was approximately \$27.6 million. Approximately \$8.9 million of these excess repair parts were "creditable excesses", i.e., not in excess of the requirements of the Stock Fund. During 1960, the totals were approximately \$29.7 million and \$9.0 million, respectively, for 310 ships. In two years a loss of approximately \$39.4 million dollars of repair parts purchasing power has been sustained by the operating forces. These same ships were found to be below allowance for other repair parts by approximately \$41.3 million.81 The fleet commanders have not had the funds to replace all these shortages.82 They have devoted considerable effort to obtaining the necessary funds, revisions to the "credit" policy and revisions to allowance lists, all with only limited success.

Repair part allowances are determined on a per ship basis. If the same equipment is installed on many ships, then many sets of repair parts are initially procured to go aboard these ships. The supply system, on the other hand, may need only a fraction of this total to support the demands of all

<sup>80</sup>U.S., Navy Department, Office of Chief of Naval Operations, <u>OpNav</u> Instruction 4441.4 of 20 December 1956.

<sup>81</sup>Consolidated Supply Overhaul Availability Reports, 1960 and 1961, (Bureau of Supplies and Accounts files).

82<sub>Supra</sub>, p. 37.

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these ships as many of these items are slow moving "insurance" items. In addition, the shortage of Stock Fund Operating capital and the necessary attention to turnover have tended to increase the number of individual decisions not to stock any of a specific insurance item in the supply system ashore. Thus, when these items are determined to be in excess of the needs of a specific number of ships, they are also in excess of the needs of the Navy Stock Account. If the Stock Account accepted these items for credit, the Fund would suffer the loss when they were declared surplus.

The shortage of operating funds to replace shipboard inventories coupled with the limitations inherent in the credit for returns policy resulted in local actions, one of which was viewed with disfavor by the General Accounting Office.

Military activities also resorted to various uneconomical practices in order to obtain parts and supplies to accomplish their mission when consumer funds were short. One such practice was the establishment of a separate supply activity, thus duplicating functions for which other activities have the responsibility and capability. This was done in order to save consumer funds by supplying as free issues items that otherwise would have been bought from the stock fund. The ... supply activity stores material removed from ships that are authorized for disposal and issues this material at no cost to ships of the fleet.<sup>83</sup>

This is where the issue stands today. In a subsequent chapter one proposal to solve part of this problem will be discussed.

<sup>83</sup>U.S., General Accounting Office, <u>Report on Review of Stock Funds and</u> <u>Related Consumer Funds in the Department of Defense</u>, Part I, January, 1962.

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#### CHAPTER V

#### A LOOK AT THE FUTURE

### General

Change is inherent in the order of things. Insofar as the forces which it is designed to support change, logistics must change. As far as possible logistics must anticipate the changes necessary to achieve the support requirements. In this sense, logistics is always a "problem" how to change to meet actual or anticipated requirements of the supported forces?<sup>84</sup>

The influence of the Navy Stock Fund on the Navy Supply System and Navy logistic support is evident. Every echelon of the Naval establishment has a vested interest in any change in the fund's operating policies. In return, this widespread interest begets controversy when a significant change in policy or procedure is proposed. Several changes are being actively considered at the present time. In addition the establishment of the Defense Supply Agency on November 6, 1961, to provide "the most effective and economical support of common supplies and services to the military departments and other DOD (Department of Defense) components"<sup>85</sup> is certain to produce consequential procedural change in both policy and operations. The proposed changes are intra-Navy and are sufficiently formulated or familiar to permit investigation of their possible implications. The potential impact of the progressive transfer of the responsibility for the funding of wholesale inventories to the Defense Supply Agency Stock Fund is, at the present time, mostly conjecture since definitive operating procedures have not been published. For this reason the proposed intra-Navy changes will be discussed first.

<sup>84</sup>Lackas, John C. and Seeds, Elmore W., <u>Military Supply Management</u>, Volume XIV of the <u>Economics of National Defense</u>, ed Benjamin H. Williams, (Industrial College of the Armed Forces, Washington, D.C., 1954 and 1957), p. 75.

<sup>85</sup>U.S., Department of Defense, "Defense Supply Agency", <u>Department of</u> <u>Defense Directive 5102.22</u> of November 6, 1961, p. 3.

# Local Inventory Accounting

The procedures prescribed herein apply to all ashore activities which carry Navy Stock Account material for local operation and maintenance only. The procedures provided herein do not apply to any activity stocking Navy Stock Account material for redistribution, even though part of such inventory is stocked for local operation and maintenance.<sup>86</sup>

The local inventory accounting procedures referred to above are now (commencing May 1, 1962) being operationally tested at several Naval activities. Basically the plan proposes a revolving fund for each activity. This fund will consist of obligation authority (cash) and inventory. A Navy Stock Fund allotment will be issued to each activity. In addition a total dollar resources limitation will be established. This limitation will be applied to the end of the month total of the unobligated balance of the allotment, the value of inventory on hand, including material on order, minus the value of transfer requests received from other supply officers. This procedure is required to prevent any large accumulation of inventory by the simple expedient of drawing on the Navy Stock Account inventories held by other activities.

The stated objectives of the proposed procedures include the development of a system which provides for automatic apportionment, allocation and allotment of the receipts from issues, increased local inventory control, development of an adequate accounting structure for management purposes and simplification of operating procedures.

The Navy Stock Fund local inventory budget encompassing total stock fund resource requirements will be coordinated with the local operation and maintenance budget, and will be submitted via the management bureau granting the operation and maintenance allotment to the Bureau of Supplies and Accounts for approval. This will insure proper coordination between user and supplier. Inventory control points are relieved of management control over the portions of the Navy Stock Account Stores which are carried in local operating inventories. Allotment reports, reconciliation reports, accounts receivable reports, and stores returns will be submitted

<sup>86</sup>U.S. Navy Department, Office of the Comptroller, <u>Department of the</u> <u>Navy Handbook for Navy Stock Fund Local Inventory Accounting</u>, 25 May 1961, pp. 1-3.

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in accordance with current instructions in the NavCompt Manual. Financial Inventory Control Reports will not be submitted by activities accounting for local operating inventories.<sup>87</sup>

Material in excess of local requirements would be transferred to appropriate distribution points. Net gains and/or losses due to local operations (excluding obsolescence) would be charged to the local operating and maintenance allotment. (This feature is being held in abeyance during the test period and may be modified depending on the results of the test).

If this proposed procedure were implemented as now proposed it would apply to approximately 90 activities. These activities now hold approximately \$20 million in Navy Stock Account Inventories. Their sales totaled about \$56 million in Fiscal Year 1961. It is estimated that allotments totaling \$34 million would be required to establish this system.

Although this system would increase the responsibility of local commands for inventory control, financial control would still be maintained at the Bureau of Supplies and Accounts level. The Navy Regional Accounts Offices would "keypunch data on NavCompt Forms 153 (Stores Balance Sheet) submitted by the activities and will include the information in the Navy Stock Account financial inventory control tabulation each quarter."<sup>88</sup> Control would also be maintained through the approval of the allotments. The system would bypass the Inventory Control Points and, if approved by the Bureau of the Budget, would eliminate the apportionment requirement. The Stock Fund would have to absorb local "errors" which resulted in obsolescence. Normally the activities would be required to procure "Navy Stock Account material which is accessible through the Navy supply system, and commissary stores"<sup>89</sup> from these sources.

<sup>87</sup><u>Ibid</u>., pp. 1-4. <sup>88</sup>Ibid., p. 4-1. <sup>89</sup><u>Ibid</u>., p.1-3.

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Capitalization of Shipboard Inventories

It is my recommendation that the inventories of consumables and repair parts aboard ships with central storerooms be converted immediately into Naval Stock Account. - RADM E. F. Metzger, SC, USN, Supply Officer, Commander in Chief, Pacific Fleet.<sup>90</sup>

Once again, nearly twelve years after the decision was made to decapitalize shipboard inventories, a proposal to extend Stock Fund financing to the shipboard level is being seriously considered. It should be recognized, in addition, that this proposal includes the financing of repair part inventories, a procedure without precedence. The recommendation is supported by a statement of the factors which prompted it, a review of some of the expected advantages and an analysis of some of the possible disadvantages, particularly those that have been expounded so often in the past that they have been accepted as fact by many members of the Navy today. In an attempt to present as unbiased a review of this proposal as possible, the advantages and disadvantages set forth in the referenced conference agenda item will be briefly reiterated as presented. A discussion of additional implications will then follow.

The S&E Funds shortages has been the subject of many presentations and much correspondence.... Attempts have been made each year to provide for this funding. However, because of the BuShips (Bureau of Ships) format for budget presentation, this item has been segregated as if it were distinctly separable from the other operating costs of the Pacific Fleet. The rules for the use of S&E funds provide that procurement of supplies and equipage shall be chargeable to the ships' OPTAR (Operating Target) allotments. These items listed as "deficiencies" are items which should have been bought currently with the funds made available to the individual ships for their day to day operations. Since they were not, it is obvious that this is a deficiency in OPTAR funds rather than in a special category. Because of the separation of this segment it has been feasible to delete it entirely in the budget review process.<sup>91</sup>

The above statement sets forth the "straw that broke the camel's back"

<sup>90</sup>Report of Commander Service Forces Pacific-Commander Service Forces Atlantic Joint Conference, San Diego, California, 19-24 February 1962, Agenda Item No. 30, p. 13 (In the files of the Office of the Chief of Naval Operations)

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<sup>91</sup>Ibid., p. 1.

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reason for the current interest in extending Stock Fund financing to the shipboard inventories. The initial "outfitting" of ships with repair parts is paid by the shipbuilding appropriation. Likewise the cost of repair parts for the new equipments installed during the ship's operating life is now borne by the appropriations charged for the procurement of the parent equipments. The ship starts with an inventory of repair parts. As a part is used it is to be replaced with a like item paid for with the ship's operating funds. In recent years, it has become more and more evident that ships have been "eating down" these inventories without replacement due, according to their well substantiated testimony, to the lack of operating funds. The deficiencies resulting from this procedure have been compounded by allowance list changes resulting either from the addition of new equipments for which repair parts were not furnished initially, analysis of operating reports such as machinery repair records or simply from new methods of computing allowances. The Consolidated Shipboard Allowance List (COSAL)<sup>92</sup> has borne the brunt of the blame for this latter cause even though there is little if any substantiating evidence to support such censorship. Regardless of the cause of the deficiencies, they exist. Estimates of the magnitude of these shortages range from \$10 million to \$40 million.93

There have been many solutions proposed. These include more accurate determination of the allowance list items by use of a military essentiality factor in the mathematical model used for arriving at recommended allowances, increase of fleet operating funds, more rigid control of the use of fleet

<sup>92</sup>See: Iverson, R.G., Fisher, R.D., Wenzel, R.F., Stallings, O., <u>The</u> Growth of a Rational, System Approach to Naval Repair Parts Inventories: <u>The</u> Introduction of <u>Military Essentiality</u>, (Unpublished Research Report, School of Government, George Washington University, January, 1962.)

<sup>93</sup>Supra, p. 43. Supply Availability records only show the amount of shortages at the time the ship is inventoried. Fleet Commanders have only been able to fund the most critical of these deficiencies.

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operating funds and finally capitalization of these inventories into the Navy Stock Fund. The improvement of allowance lists is being actively pursued. The addition of a military essentiality factor to mathematical models has been the subject of extensive research and is, although highly desirable, a time-consuming and expensive undertaking.<sup>94</sup> Attempts to increase the fleet operating funds have not been very successful and more rigid control of the use of fleet operating funds, even if the implication of misuse is valid, would probably not generate the required amount.<sup>95</sup> The capitalization of these inventories into the Navy Stock Fund is, therefore, considered to be the most expedient method of obtaining the necessary funding.

The conference report submits the following additional advantages to such a procedure:

To me the most important advantage is that this action will enable the ships to carry on board the items needed to stay at sea. This is not possible now, but stock funding will make it possible.

Second, this will improve available knowledge as to true consumption rates and true requirements for mobilization and for budget purposes.

Third, it will simplify the work aboard ship and it will reduce the workload ashore.

Fourth, it will eliminate the "end of the fiscal year" problem which now prevents ships from replenishing in an orderly manner.

Fifth, operating funds will be used for operating and will not be tied up in inventory.

Sixth, it will eliminate the current serious problem of erroneous charges to OPTARS and Type Commander allotments.

Lastly, as a general observation, it will put us on a business-like basis with good management control of our funds and inventories.<sup>96</sup>

The discussion of these advantages is limited, to the most part, to the

94 Iverson, Fisher, etal, op. cit.

<sup>95</sup>Report of Commander Service Forces Joint Conference, <u>op. cit.</u>, p. 5.
<sup>96</sup>Ibid., p. 12.

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rebuttal of the contra-disadvantages. The report contends, for example that contrary to the often advanced contention that shipboard paper-work will be increased, the accounting and reporting necessary under the Navy Stock Fund procedures will be no more onerous than the present OPTAR procedures; usage data would be more timely not less; and that the present allowance lists represent the most accurate listings of shipboard repair parts requirements that can be expected to be available in the foreseeable near future. Several other commonly mentioned disadvantages are discussed in greater detail. The principal one is that the extension of the Stock Fund to shipboard inventories would have a deleterious affect on the Fund. Inventory turnover will be reduced because of the addition of many slow moving insurance items not now carried in the Navy Stock Account; shore establishment stocks would be dispersed and less available to system demands; and the Stock Fund has insufficient cash to restock the shore establishment after the sudden and heavy withdrawals by the fleet. This contention and the probability of ships overstocking, of further reductions in ships operating allotments or of increased control by the "comptroller types" as the result of such a change are intelligently debunked.

The comments contained in ther conference report agenda item, intended as a stimulus for further discussion, empahsized the current problem - a source of funds to replace shipboard repair part inventories. Although this is undoubtedly the catalyst which set the current proposal in motion, there are several other reasons that similar proposals have never advanced to the present level of consideration. The primary reason, of course, is the impact on shipboard paperwork. The technological advances of the past decade and a half have resulted in an increased requirement for shipboard personnel, both for maintenance and operation. The modern man-of-war is more than just a platform for long range artillery that need worry only about surface attack. During

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World War II a ship's vulnerability to air attack was demonstrated beyond any doubt. In addition the effectiveness of the submarine was increased to the point that speed and maneuverability were no longer sufficient as defensive measures. Increasingly complex anti-aircraft and anti-submarine systems have been installed. Nuclear weapons and missiles have added additional defensive and offensive systems and weapons. Ships have grown larger to accomodate both the systems and the personnel required to maintain and operate them. Paperwork requires personnel but does not add to the ship's offensive or defensive capability. It requires space, always at a premium on board a Naval vessel. The natural consequence was to devise ways of transferring paperwork ashore.

During this same period rapid advances have been made in the field of repair parts inventory management. The COSAL program, established in 1956, has provided a medium of centralization. The "bin-loading" of repair parts, a natural and complementary development, has increased the capability for centralized control of repair parts on board ship. Centralized storage and control is a must if stock funding is to be effective and efficient. These improvements in repair parts inventory management were necessary because of the increase in quantity of parts required due to the installation of more and more equipments and the ever-increasing applications for electronics and other complex electromechanical devices. It has been determined that there are approximately 62,000 replaceable repair parts in the equipments on board the USS George Washington (SSBN 598), the U.S. Navy's first Polaris firing submarine. Approximately 55,300 of these parts can be installed by the ships force. In developing an allowance list for this ship, it was determined by the allowance list preparing activities that approximately 25,000 of these parts should be carried on board ship. The value of these parts is approximately \$1.5 million.<sup>97</sup> It is highly

97 Iverson, Fisher, etal, op. cit., p. 60.

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doubtful if any World War II ship required either as large or as valuable an inventory. This ship is an exception but the fact remains that every ship must carry many more repair parts than ever before. The problem of maintenance of such inventories can not be solved on the basis of past practices. It must be considered on the basis of requirements germane today with full consideration given to the use of all the improved tools available to the manager today. Mahan, speaking to the War College in 1888 said "fuel is the life of modern naval war; it is the food of the ship; without it the modern monsters of the deep die on inanition. Around it, therefore, cluster some of the most important considerations of naval strategy."<sup>93</sup> Mahan, speaking today, would certainly change this statement to include repair parts, especially if referring to the nuclear-propelled ships which are rapidly entering our fleet.

# The Impact of the Defense Supply Agency

The function of organization begins with the objective of the enterprise, i.e., with the good or service to be produced. It must be determined by analysis what services of individuals will be necessary to produce the good or service in question. This determination entails questions relating to both degree and type. How specialized should the services to be contributed by each individual occupying a position, and what should be the type of these services? Both of these questions must be answered. When they are, the process of synthesis can begin.<sup>99</sup>

One of the responsibilities of the Defense Supply Agency (DSA) is the operation of a wholesale distribution system for assigned supplies. A Defense Stock Fund has been established to "provide the means for management, financing, control and accounting for material as authorized to be capitalized under the

<sup>98</sup>Benjamin H. Williams, Distribution Logistics, Volume XIV of <u>Emergency</u> <u>Management of the National Economy</u>, (Industrial College of the Armed Forces, Washington, D.C., 1955), p. 25.

<sup>99</sup>Robert Tannenbaum, "The Manager Concept; A Rational Synthesis", <u>Administrative Control and Executive Action</u>, ed B.C. Lemke and J.D. Edwards (Ohio: Charles E. Merrill Books, Inc., 1961), p. 18.

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fund by the Secretary of Defense."<sup>100</sup> The capital of the Defense Stock Fund will be provided by transfer of cash and inventories from the departmental stock funds and by direct appropriation as required. The Defense Stock Fund will finance both peacetime operating inventories and mobilization reserve stocks. The fund will be operated in accordance with the current regulations governing the operations of Department of Defense stock funds.

The full impact of the establishment of the Defense Supply Agency and the Defense Stock Fund for consolidated control of all "common supplies" on the Navy Stock Fund will not be known for sometime. The immediate effect has been negligible to-date. The transfer of single manager controlled inventories is preceeding in an orderly manner. At the present time these inventories are being managed and accounted for under the same procedures as when they were assigned to a service single manager. Before any accurate prognosis of the future of the Navy Stock Fund can be made, criteria must be established for "retail inventories" and "common supplies." Although guidelines established for single-manager commodities are being applied now, these guidelines may or may not be continued. Rumors are rife concerning the absorption by DSA of all wholesale distribution points and of setting the limits on retail inventories as low as sixty days supply. It is the off-hand opinion of many that if such actions are taken the need for the Navy Stock Fund will be questionable, for although the requirement for a suspense account may still exist, the cost might be excessive.

At the present time the scope of DSA operations are limited to "within the United States, excluding Alaska and Hawaii except as specifically extended

<sup>&</sup>lt;sup>100</sup>U.S., Department of Defense, "Budgeting and Funding for the Defense Supply Agency," <u>Department of Defense Instruction 7200.6</u> of November 9, 1961, p. 3.

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by the Secretary of Defense."<sup>101</sup> In Fiscal Year 1962, approximately 390 activities and offices were assigned Navy Stock Fund allotment numbers though they did not necessarily receive allotments. Approximately 25% of these activities and offices are located outside the limits established for DSA. The principal Navy Stock Account wholesale activities included in this listing are the five supply centers, nine supply depots and eleven shipyards. Of these, one supply center, four depots and one shipyard are located outside these boundaries.<sup>102</sup> As of 30 June 1960, these latter wholesale activities' inventories were valued at approximately \$129 million. In addition the inventories carried at all other activities were valued at \$289 million. Assuming only 50% of these other activity inventories to be retail and excluding the single manager stocks carried in the Navy Stock Account, the total retail and "overseas" wholesale stocks would total approximately \$280 million or approximately 17% of the Navy Stock Account inventories.<sup>103</sup> Add to this amount an estimate of the value of shipboard inventories, <sup>104</sup> if the decision is made to capitalize them into the Navy Stock Account, and the total retail inventories left for the Navy Stock Fund would become approximately \$400 million dollars, a significant amount even in these days of fabulous figures.

There are many potential advantages to the establishment of a single wholesale stock fund in addition to the expected savings in investment, facilities, and personnel through consolidation and centralization. Assume,

101U.S., Department of Defense, "The Defense Supply Agency", op. cit., p. 2.

102U.S., Navy Department, Bureau of Supplies and Accounts, BuSandA Management Handbook, NavSandA Publication 285, 2 November 1961, pp. 4-8 to 4-18.

<sup>103</sup>U.S., Navy Department, Bureau of Supplies and Accounts, <u>Navy Stock</u> Fund, Annual Report, Fiscal Year 1960, p. 5.

<sup>104</sup>Calculated on basis of 229 central storeroom ships and 264 destroyers.

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for example, that the Defense Stock Fund absorbed all wholesale inventory losses, including obsolescence and allowed full credit for items in unissued condition returned by the retail level funds. Regardless of whether these losses were to be recovered through pricing or appropriation, the retail inventory manager would be relieved of this problem area and would be able to devote more attention to improving his stock control procedures. Accounting would not necessarily be increased, particularly if the retail fund was a segment of the wholesale fund, the same principle used in the past for accounting for separate categories of Navy Stock Account materials such as provisions. A more obvious advantage, of course, would be the increased level of authority on which the Defense Stock Fund would operate.

### CHAPTER VI

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Summary

The Department of the Navy has had this very excellent tool for management for 54 years. It started 54 years ago, as a rather small business operation, and was very helpful in World War I. It was carried on in a substantial size through the twenties and thirties and stood the test of World War II in excellent fashion.

> W. J. McNeil Assistant Secretary of Defense (Comptroller)<sup>105</sup>

The true measure of any managerial tool is its usefulness to management and its capacity to adjust to management's changing needs. The capacity of the Naval Stock Fund to so adjust during the years since Mr. McNeil made the above statement has certainly been tested and faces more severe testing in the near future. From a modest beginning as a means of financing a relatively few stores the Stock Fund has developed into a many faceted instrument of control. Congress has found it effective for control of military stockpiling, so much so that it granted the Secretary of Defense authority to direct the use of stock funds for the financing of inventories throughout the Department of Defense. The Navy has developed its entire accounting and supply system around the stock fund concept. Although it is, without a doubt, a medium for "backdoor spending", in that appropriations are not required to authorize expenditures there rom, the stigma of backdoor spending has been removed by official sanction and the control exercised by the Bureau of the Budget through the budget and apportionment process.

<sup>&</sup>lt;sup>105</sup>U.S., Congress, Senate, Committee on Armed Services, <u>National</u> <u>Security Act Amendments of 1949</u>, (Washington, Government Printing Office, 1949), p. 2669.

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From the time of its establishment in 1893 until after World War II, the Navy Stock Fund was used to finance consumable materials. After World War II, more and more items of a non-consumable nature found their way into the Stock Account until finally, in 1957, repair parts were capitalized therein. This decision has placed a severe strain on the fund's ability to retain its revolving feature by reducing the stock turnover ratio which, in turn, reduces the utility of the fund's cash. In addition, the extension of the fund's application has increased both the span and the intensity of vested interest. In the words of the famous comedian, "Everybody wants in the Act."

The relaxation of the criteria for items to be financed has increased the effect of obsolescence on pricing and has emphasized the potential effect of relaxing the restrictions on credit granted for material returned to the Stock Account. The resulting combination of increased prices and limited "refunds" has tended to reduce the buying power of fleet operating funds. The forces that the system was designed to support are no longer supported at a level commensurate with need. The Fleet, therefore, has countered with an appeal to be included in. The grass appears greener on the other side of the fence.

One can only hazard a guess as to whether the present situation would have developed had the repair parts inventories not been capitalized into the stock fund. Except for short periods during and immediately after each war, the record indicates that Congress and the administration have consistantly refused to approve the full amount of the Navy's requirements for funds for the Navy Stock Fund. The fact that these funds are used for investment rather than final expenditure has failed to impress Congress. Even the reduction in mobilization reserve material has not been a cause for alarm. This attitude

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was understandable during the thirties, a period of economic depression and noninterventionalism; it is less easily understood during the current cold war. These are the facts, however. Exhibit II, page 33 testifies to the decrease in the Navy's total inventories. Even though the investment in peacetime operating stocks has increased, it must be recognized that part of this increase represents the markup for recovery of obsolescence - a markup that increased the price of materials to the fleet and other customers by approximately \$12 million in Fiscal Year 1961 alone. Even with this markup the Stock Fund is unable to break even. The view from within is anything but green.

Since World War II, there has been a consistent trend toward centralization of control of Navy inventories. The establishment of the Supply Demand Control Points did not decentralize control, only operations. Control of the Stock Fund was not only retained at the departmental level but was strengthened through the increased financial controls applied and was expanded to other types of inventories by the capitalization of repair parts inventories carried in the shore establishment. In addition, control over shipboard board repair parts inventories was centralized through the Consolidated Shipboard Allowance List Program. Decisions made in regard to the Stock Fund inventories have, as has been illustrated, had a profound effect on these non-funded inventories. This "indirect" control has proven to be a source of constant irritation, a problem area that will require more and more attention and requires immediate attention now.

The proposal to extend Stock Fund financing, if implemented would further centralize the control of inventories. Allowance lists would be retained, more than likely, but the financial control would not only rest at the departmental level, but the level of these inventories would be subject to the

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indirect approval of the budget approval authorities as well. In direct conflict with this trend toward centralization of control of inventories and the wherewithall to finance them is the proposal entitled Local Inventory Accounting. This plan, as now envisaged, places the responsibility for maintaining the capital of the local fund with the local command, while retaining overall control of both funds and procedures at the departmental level. It would appear that such a plan would increase the problems of the Stock Fund Managers both in the budgetary and pricing policy areas. Stringent controls would have to be placed on transfers of material in excess of the needs of the local command to avoid the passing of local inventory losses on to the parent Fund. If, on the other hand, such losses are not chargeable to the local fund the parent fund will be placed in the position of absorbing losses over which it has only partial control.

The potential impact of the establishment of the Defense Stock Fund can be summed up very briefly -- beneficial or disasterous depending upon the policies established. If the Defense Stock Fund accepts the responsibility for obsolescence losses and other abnormal losses the Navy Stock Fund's future will indeed be brighter. Conversely, if the Defense Stock Fund is to be operated under a pure revolving fund concept, accepting only the items with high turnover and low obsolescence, the Navy Stock Fund would, for all practical purposes become nothing more than an annual procurement appropriation.

Conclusions and Recommendations

The real manager takes what he's got, improves it and wins with it.---Dr. B. H. Jarman, Professor of Education, George Washington University.

Throughout its history, the Navy Stock Fund has had to operate under many handicaps. That it has been able to do so so successfully should be a

source of pride to its managers, both past and present. That it has been required to do so should not be surprising. Its very strength has been its capacity to adjust to the needs of management and the forces it was designed to support. Many of the problems it faces today have been faced before. This does not mean they can be met with the same solutions. Decisions must be based on the present and the future. The past is useful for analysis only, analysis that should enable us to make better decisions now.

One of the principal problems which faces the management of the Stock Fund today, the limitations on operating capital, will never be completely solved, nor should it be. There must be a continual need to improve; these limitations, in the absence of a profit motive, provide such a stimulus. Whether these limitations are too stringent is the real heart of the problem. The Inventory Managers prepare their budgets on the basis of detailed analysis of historical data and evaluation of the requirements represented by the Navy's operating plans. If, as has been contended, these budgets are being measured by a yardstick which fails to recognize the validity of the need for insurance items as well as fast-moving consumables in the operating stock base, then either the planning base must be changed or the measuring criteria must be modified. A change in the planning base would require decapitalization and a return to the consumable-stock criteria. This is considered inappropriate in view of the proven economies that stock funding of these insurance items has accomplished. In addition, I doubt that it would accomplish anything other than adding another "fund shortage area." I therefore recommend that:

 A procedure be developed to segregate and identify losses due to obsolescence and that all such losses be accumulated in suspense account to be used to justify an appropriation requested each year to cover such losses.

Obsolescence, like depreciation, is an expense that should be chargeable

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to current operations. The Stock Fund is not an operating appropriation. The present method of charging obsolescence to operating appropriations through standard pricing fails to accumulate and identify these losses and therefore, to provide a means of investigating and/or controlling them. The primary cause of obsolescence is assumed to be technological advance. The decisions that are made to continually improve the effectiveness of our fighting forces are not being made with full knowledge of the cost of such decisions. Marginal improvements might well be deferred until materials on hand are utilized, if such information is available. These decisions are made in the interest of national well-being and are influenced by political and international considerations over which the operating forces have little, if any, control. The forces in being, on the other hand, are charged with the responsibility for effective utilization of the weapons in hand and are provided funds for carrying out these responsibilities. They should not be required to use a portion of these funds to offset the cost of replacing these weapons. Since July 1, 1957, they have been required to do so. During Fiscal Year 1961, \$12 million was recovered through surcharges for obsolescence, a goodly portion of this undoubtedly came from fleet operating funds.

If, when material was declared surplus, the reason for such declaration were more accurately indicated, a more accurate cost of obsolescence would be determinable. Mistakes and errors in judgment made at the time of procurement could not be charged off as obsolescence and would be brought to managements attention so that more positive and specific corrective action could be taken. Too much accounting detail? The Navy Stock Fund operating losses have amounted to nearly a billion dollars in the past eight years. How much of this was World War II and Korean War surplus, as distinguished from that resulting from

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technological advance or from mismanagement? I think it is important to know this and to face up to the fact that these differences exist and that all of them are, to some extent, controllable.

The policies on item criteria and credit for material returns are closely related to and have a direct bearing on the magnitude of obsolescence losses. Shipboard repair parts that are obsolete can be declared surplus and written off the books with relative ease because they have already been finally expended. Appropriation Purchases Account material can be declared surplus with no attempt at recovery of obsolescence losses from the forces they were procured to support. If obsolescence of Stock Fund materials was charged to an annual appropriation all elements of the operating forces would be relieved of the responsibility of trying to budget for an expense that is impossible for them to control. It is therefore recommended that, in consonance with recommendation number one:

 Full credit be granted for the return of unused Stock Fund financed material to the Stock Account.

There are several alternative methods of alleviating the present condition of Fleet repair parts inventories. It is considered highly doubtful that an increase in operating funds will be obtained, and if obtained, whether they would prove to be anything but a temporary respite. I do not hold with the contention that these deficiencies are not a "special category." These are inventories which may or may not be used during the fiscal year purchased. The only reason they are not accounted for in a stores account is to reduce shipboard paperwork, a rather dubious conclusion. If these inventories are properly maintained under the procedures in effect today, the principal savings in paperwork is the report of their value. Semi-annual readiness reports, required by most Type Commanders, include a report on repair parts shortages.

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If these reports are valid, quantity records must be current. The time required to prepare financial reports would, to a great extent, be offset by the time currently utilized to maintain accurate OPTAR records. In addition, stocks would be where they are most likely needed at the time the need is most urgent, and in the event of a nuclear attack, would be very widely dispersed. Transfers between ships would be simplified or less reluctantly made. One alternative recommendation is, therefore, a reiteration of that made by Admiral Metzger:

3A. Inventories of consumables and repair parts aboard ships with central storerooms should be converted immediately into the Naval Stock Account.

The above recommendation does not solve the predicament for submarines and other small ships without central storerooms or supply personnel. These ships have traditionally operated under different supply procedures. Recommendations number one and two would materially relieve the Type Commanders of these ships of part of the source of their concern. Moneys previously expended for materials to maintain the necessary inventories would be recoverable for updating these inventories. In addition the cost of repair parts would be reduced. This same solution could be applied to ships with central storerooms. It is therefore recommended that, in the case of submarines and small ships, and as an alternative for all ships:

- 3B. The present method of financing shipboard consumable and repair parts inventories be continued provided that:
  - (a) Recommendation 1 and 2 obtain.
  - (b) Increased emphasis be made to improve allowance lists.
  - (c) An appropriation be requested, as a one-time measure, for the specific purpose of bringing these inventories up to allowance.

Either of the alternative recommendations presented above will restore shipboard inventories to the proper levels and will assist in maintaining them

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at these levels. It remains, as it should, the responsibility of ship commanders to ensure that these levels are maintained. The concern that has been expressed about the reduction in level of Stock Account inventories carried in the shore establishment will not be any less valid under either proposal. The principal difference is that under recommendation 3A the Stock Fund will need additional capital. While I do not consider that this is a minor task, I do believe that these funds can be more readily justified as a Stock Fund requirement than as an operating requirement. I believe also that the Stock Fund and Navy Inventory Managers will benefit substantially by the additional data obtained from Stock Fund reporting on board ship and that the continual and more accurate reporting required will benefit the allowance list program.

I fail to discern, however, any substantial advantages in the proposal for Local Inventory Accounting. I believe it will only add one more sub-system to a system that is already plagued with procedural exceptions. I therefore recommend that:

4. The Local Inventory procedures should not be implemented.

It is difficult, if not impossible, to make a recommendation concerning the procedures to be adopted by the Navy Stock Fund in order to better fulfill its function after complete implementation of the Defense Stock Fund concept. The scope of the responsibility of the Defense Stock Fund has not been determined. Whatever the determination, however, it will be more soundly conceived if a close working arrangement is established immediately with those responsible for the policy decisions and if the Navy has a definite proposal to present to the Defense Supply Agency. I therefore recommend that:

5. A close working arrangement and liaison be established with the Defense Supply Agency and that the Navy recommend that the Defense Stock Fund accept full responsibility for obsolescence losses and

permits full credit for material returned from the retail stocks to the wholesale stocks. In addition, the Defense Supply Agency should be requested to consider recovering obsolescence losses through direct appropriations or allocation to operating appropriations rather than through surcharges on materials carried in the Stock Fund.

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